PART 1.

PORTFOLIO

OF

DERMOCHROMES

BY

PROFESSOR JACOBI

Of Freiburg im Breisgau.

English Adaptation of Text

BY

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DEDICATED

TO

GEHEIMRATH PROFESSOR ALBERT NEISSER

OF BRESLAU.

Preface to the English Edition.

THE process employed in the production of the illustrations in the following work is that known as CITOCHROMY, and is the invention of Dr. Albert of Munich. The reproduction of colours by this process is believed to be more perfect than by any other hitherto in use, and is obtained almost entirely by mechanical means apart from manual work.

The great majority of the illustrations are taken from models in the Breslau Clinic, executed by Herr Kröner, and are reproduced by kind permission of Professor Neisser, to whom the inception of the work is mainly due, and to whom it is dedicated by his former pupil and assistant, Professor Jacobi.

Thanks are also due to Professors Lesser and C. Lassar of Berlin, Dr. Bayet of Brussels, and Dr. Henning of Vienna, for permission to make use of models in their possession.

Acknowledgment must also be made of the services rendered by the gentlemen who executed the various models utilized—viz., Herr Kröner of Breslau, Herr Kolbow and Herr Kasten of Berlin, Mons. Baretta and Mons. Tramond of Paris. A few of the models have also been made by Professor Jacobi himself after the method devised by Mr. Cathcart of Edinburgh.

The object of the Atlas is not to illustrate the rarer

forms of skin disease, but to furnish to medical men, teachers and students a handy and comprehensive series of illustrations of the skin affections most frequently met with in practice, in their various phases and at a reasonable price within the reach of all.

As no attempt has been made to supplement the necessary systematic treatises on diseases of the skin, the text has been condensed to the greatest possible degree, without, however, omitting any of the essential facts.

J. J. P.

London,
February, 1903.

NUMBERED LIST OF SUBJECTS FOR PART I.

Erythema Exsudativum Multiforme.

Plates I., II., Figs. 1, 2, 3, 4.

Erythema multiforme is a skin disease which occurs as part of a general infective malady—especially in spring and autumn—in which macules, papules, vesicles or bullæ develop in a few days on typical seats of predilection, especially on the backs of the hands and feet, and extensor surfaces of the fore-arms and legs; it often also appears on the face and other parts of the body, but only in exceptionally severe cases on the palms and soles. Thus, macular and papular erythema (Fig. 3) occur, becoming annular or gyrate (Figs. 1, 2)—when involution of the patches takes place in their centre—or vesicular (Fig. 4). The cause is unknown.

The colour is bright red in the most infiltrated marginal parts, but livid in the centre, which is frequently sunken, especially in cases of old standing and on the lower extremities. The disease is polymorphous, as different degrees of exudation may be present at the same time. If ring-shaped papules or circles of vesicles in concentric circles are present the affection is called *Erythema iris* or *Herpes iris* (a bad name). As the disease progresses the papules soften and pale without scaling, vesicles dry up, and, if no relapses occur—as they are apt to do—the whole

process runs its course in a few weeks. Some participation of the joints is not infrequently observed; implication of internal organs cannot as a rule be laid to the charge of the erythema. On the other hand, toxic erythemata occur in internal disorders, which ought not to be identified with true erythema multiforme.

Diagnosis can be easily established in typical cases from the acute onset, the general phenomena, the absence of subjective symptoms—apart from slight burning sensations—and the recovery without desquamation. The somewhat similar syphilide is different in colour, and usually occurs in different localizations; eczemas weep and itch; the occasionally similar urticarial eruptions are much more ephemeral. Ringworm, which may also occur in concentric forms, is scaly, and never presents the same typical distribution.

Prognosis is thoroughly favourable.

Treatment.—As the disease is a general one and joint affections are often present, salicylate of soda in doses of 30 to 60 grains daily, or similar preparations, are generally prescribed. When there is much burning, compresses of a 1 per cent. solution of acetate of aluminium may be locally applied; if blebs form, the alcohol spray may be recommended.

Figs. 1, 2. Models in Neisser's Clinie in Breslau (Kröner).

Fig. 3. Model in Neisser's Clinie in Breslau (Kröner).

Fig. 4. Model in Neisser's Clinie in Breslau (Kröner). A repeatedly reeurrent vesieular eruption in a tailoress, twenty-five years of age, with high fever and joint symptoms.

1. 2. Erythema multiforme.

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3. 4. Erythema multiforme.

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Erythema Nodosum.

Plate III., Fig. 5.

Occasionally associated with Erythema multiforme, but generally alone, there appear nodules as large as a hazel-nut or walnut, with special frequency on the fronts of the legs, but sometimes also on other parts, accompanied by pains and swelling of the joints, which give the impression of a bruise (*E. contusiforme*), and disappear in two or three weeks. The affection is most probably of infective character. The colour, which is at first bright red, goes gradually through the whole grade of tints which occur in blood pigment undergoing absorption. Complications with diseases of internal organs, especially endocarditis, sometimes occur, as well as hæmorrhage into mucous membranes.

The **Diagnosis** may be made without difficulty from the localization and colour of the lesions. Bruises seldom appear in such large numbers and in the same position, while they are generally accompanied by epithelial erosions. Multiple gummata develop insidiously, are different in colour, and tend to necrose.

The Erythema induratum of Bazin, which affects the same localization, is an eminently chronic disease.

The **Prognosis** is favourable in uncomplicated cases, but it must be guarded in presence of endocarditis.

The **Treatment** consists of rest in bed and the administration of salicylic preparations.

Fig. 5. Model in Lesser's Clinic in Berlin (Kolbow). Woman, thirty-six years old, without joint symptoms, treated as an out-patient.

5. Erythema nodosum.

6. Purpura haemorrhagica.

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Purpura Hæmorrhagica.

PLATE III., FIG. 6.

Under the name of Purpura are described certain diseases, probably of infective nature, in which hæmorrhages into the skin of varying intensity are observed. Petechiæ, ecchymoses and vibices are all superficial hæmorrhages, characterized by their bright red or dusky colour, not disappearing under pressure with the finger or a glass. The lower extremities of young persons are the most frequent seats of small or large hæmorrhages, which develop—generally with rheumatic symptoms and rise of temperature—commonly about the knees, and especially in spring and autumn (*Purpura vel Peliosis rheumatica*). The number of hæmorrhages is often enormously increased by repeated relapses until, after several weeks, the disease ceases and the effused blood is gradually absorbed, undergoing the well-known changes of colour.

Some forms of purpura, such as Werlhof's disease and scurvy, in which the internal organs and mucous membranes are chiefly involved, differ from this clinical picture, and are serious diseases, whereas simple purpura rheumatica is a perfectly harmless affection.

The **Diagnosis** can be easily established from the symptoms described.

The **Prognosis** of simple purpura rheumatica is favourable.

The **Treatment** consists of rest in bed with elevation of the extremities, and the administration of hæmostatic remedies, such as ergotin, tincture of iron, etc.; salicylate of soda in doses of 30 to 60 grains daily may be given on the ground of the probable infectious nature of the disease.

Fig. 6. Model in the Vienna Clinic (Henning). The subject of the illustration was suffering from jaundice.

7. Urticaria.

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Urticaria.

PLATES IV., V., VI., FIGS. 7, 8, 9, 10.

Urticaria is characterized by the appearance of wheals—*i.e.*, of very itchy, flat papules—either white, bright red (Fig. 7), or more rarely, dark red (Fig. 8) or livid in colour, which are of varying size, and appear either isolated, or in groups, or confluent. The wheals may disappear as quickly as they appear without, as a rule, leaving any pigmentation; serpiginous figures may be formed by the confluence of contiguous efflorescences. The extent of the skin affected varies extraordinarily; not infrequently the greater part of the body surface is affected either at one time, or by the occurrence of successive outbreaks of the disease. In many persons there is a marked tendency—either congenital or acquired, as the result of previously existing skin diseases—for the development of wheals on any part of the skin submitted to irritation; every scratch mark becomes the seat of an urticarial linear tract (*U. factitia*).

In children small wheal-like papules, intermixed with true wheals, often occur in frequently repeated outbreaks; these papules may exhibit a vesicle or blood-crust on their surface (*Lichen urticatus*, *Strophulus*), constituting an affection which deserves special consideration, as it represents in many instances the

forerunner of a severe, generally incurable, disease of the skin—viz., Prurigo.

The *acute circumscribed œdemas*—the so-called *giant Urticaria*—also belong to the urticarias, in which not only the skin, but also deeper tissues are affected; they appear and disappear suddenly; the disease is rare, and generally hereditary.

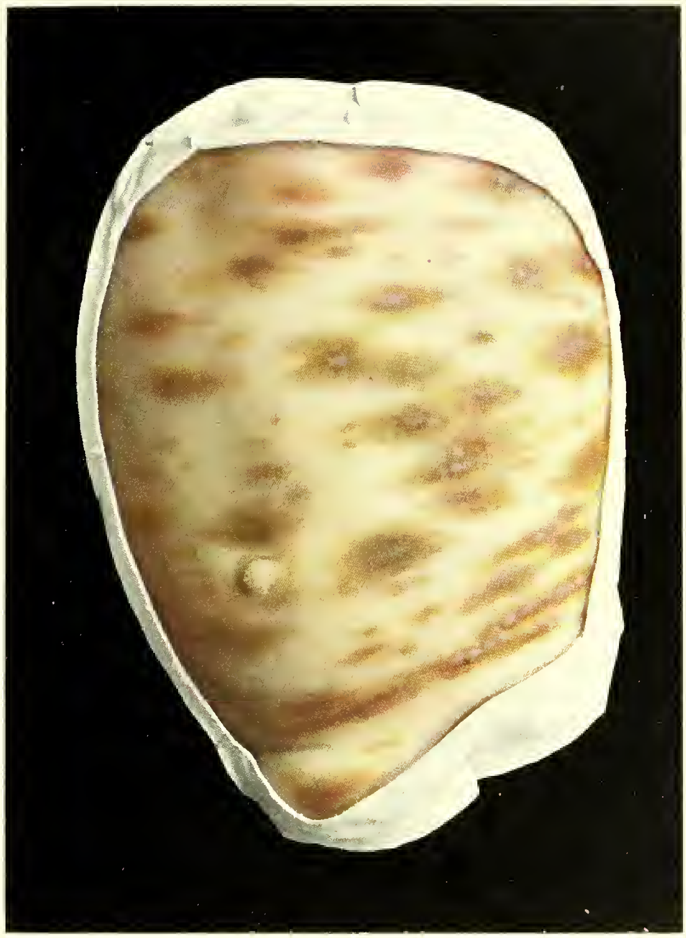
The very rare disease *Urticaria pigmentosa*, which occurs in children, must also be mentioned. The extremely persistent wheals leave deep pigmentary lesions, which exhibit the phenomena of factitious urticaria, and, as a rule, persist throughout life.

Urticaria may be evoked by external irritants in contact with the skin (insect bites, nettles, etc.), but the eruption does not remain confined to the part directly affected; it may also proceed from the gastro-intestinal tract, being caused by certain foods in different individuals (fish, crab, fruit, especially strawberries), or by drugs. As a rule it is accompanied by digestive disturbances, such as vomiting and diarrhœa (*U. ab ingestis*).

Internal disorders, especially such as determine changes in the quality of the blood (leukæmia, diabetes), are not infrequently accompanied by urticaria. Disorders of the generative organs in women may also cause urticaria, as may the introduction of urethral bougies in men. Pregnant women frequently suffer from factitious urticaria throughout their pregnancy, which usually disappears after delivery.

In addition to these forms, there are numerous cases of chronic urticaria in which no cause can be discovered, and which are specially rebellious to treatment.

8. Urticaria rubra.



9. Urticaria pigmentosa.

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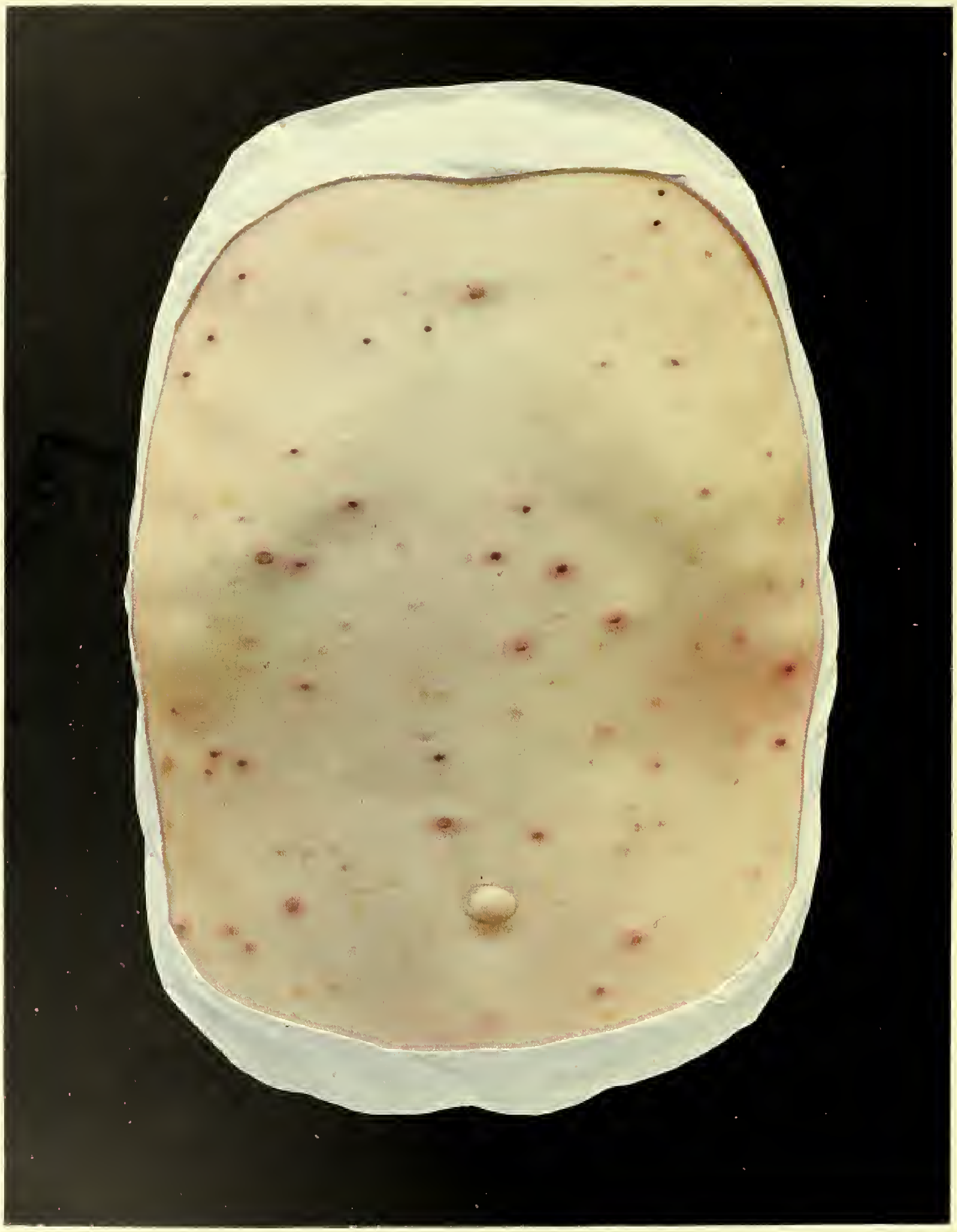

10. Urticaria chronica infantum. (Strophulus).

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The **Diagnosis** of urticaria depends upon the typical, evanescent wheals, and on the occurrence of itching. Some drug eruptions can scarcely be differentiated from urticaria.

The **Prognosis** must be guarded in chronic urticaria of childhood (? Prurigo), but generally speaking, is favourable, exception being made for chronic nettlerash in which the general condition may be very unfavourably influenced by itching and insomnia.

Treatment can only be successful in cases where the cause can be traced and therefore removed, particular attention being paid to disorders of digestion and general diseases. The cure of any affection of the female generative organs will often bring about recovery in cases of long-standing urticaria. If no cause can be discovered, treatment with atropine, arsenic, pilocarpine, ergotin, and finally with chloride of calcium, may be tried. In such cases the principal task is the relief of the sometimes excruciating itching. Opiates must only be used with the greatest caution as hypnotics; antipyrin sometimes stops attacks of irritation.

With regard to external treatment, it must be remembered that patients react in widely different fashion to heat and cold; the former is sometimes efficacious in the form of warm baths or douches, but cold water applications are often followed by better results. Lotions of pure alcohol, menthol, liquor carbonis detergens or tar may be tried, as well as tumenol, ichthyol or carbolic acid. Recently bromocoll, either in the form of salve or lotion, has been used successfully as an antipruritic. All mechanical

irritation of the skin, by rubbing or wearing coarse underclothing, must be avoided.

Fig. 7. Model in Neisser's Clinic in Breslau (Kröner). A man, thirty years of age, suffering from chronic urticaria since the age of one year.

Fig. 8. Model in same Clinic.

Fig. 9. Model in same Clinic (Kröner). Boy, two years old, suffering also from tetany. The affection distributed over the entire body; skin reflexes exaggerated; factitious urticaria over the entire skin.

Fig. 10. Model in Neisser's Clinic in Breslau (Kröner).

Perniones. Chilblains.

Plate VII., Fig. 11.

With the advent of winter, especially in anæmic young persons, and often as the effect of only slight degrees of cold, livid red nodules or swellings of doughy consistence occur on the hands and feet (Fig. 11), less frequently on the face and ears, which cause extreme itching, especially when the patient is warm. Slight mechanical irritants produce bullous elevations of the epidermis over these lesions, with blood-stained, serous contents, from which ulcers very easily form, which are atonic and heal with difficulty. In the majority of cases hereditary predisposition can be traced. Spontaneous recovery ensues with the advent of warm weather, but recurrences are almost always to be expected.

The **Diagnosis** of chilblains is easily made, based upon their seat and their occurrence with the onset of cold weather; the frequency of recurrences is to be borne in mind with regard to **Prognosis.**

Treatment must, in the first instance, be directed towards combating the anæmia, which is almost always present, and efforts must be made to harden the skin. After the development of chilblains, ulcers may be induced to heal by wet dressings with weak (1 per

cent.) solutions of nitrate of silver, or with balsam of Peru ointment. Disturbances of circulation may be treated by massage, hot baths, and subsequent washing with alcohol, painting with tincture of iodine, collodion or traumaticin, by alcohol sprays, or by vigorous inunction of a one per cent. chloride of lime ointment.

Fig. 11. Model in Neisser's Clinic in Breslau (Kröner).

12. Morbus Raynaud.

11. Perniones.

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Raynaud's Disease.

Plate VII., Fig. 12.

In **Raynaud's disease,** which is a malady due to disturbed innervation of central origin of the skin bloodvessels, local asphyxia with coldness and numbness occur along with very pale, or often cyanotic, discoloration of the skin (Fig. 12). For years the process may be limited to these associated symptoms, but necrosis may also occur, beginning at the tips of the fingers and toes (*symmetrical Gangrene*).

Treatment consists in attempting to improve the condition of the circulation by baths, massage, etc., but the results hitherto obtained are not encouraging.

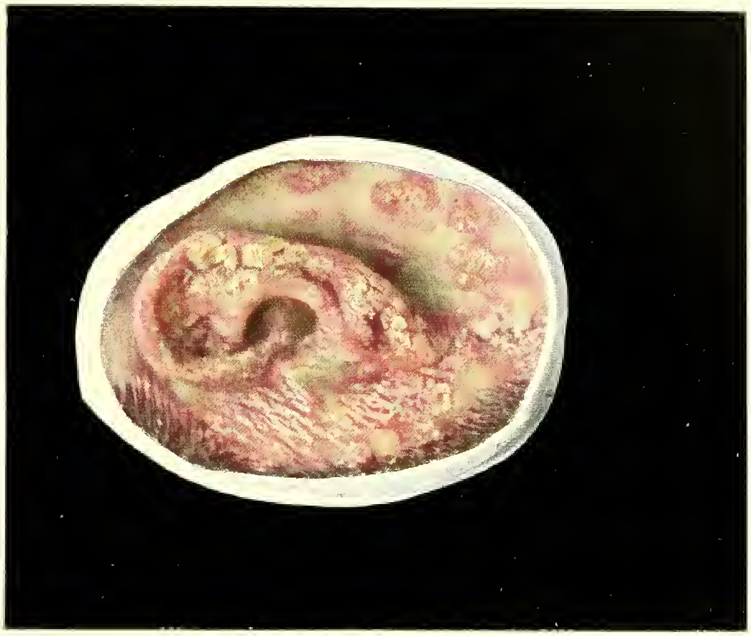
Fig. 12. Model in Neisser's Clinic in Breslau (Kröner).

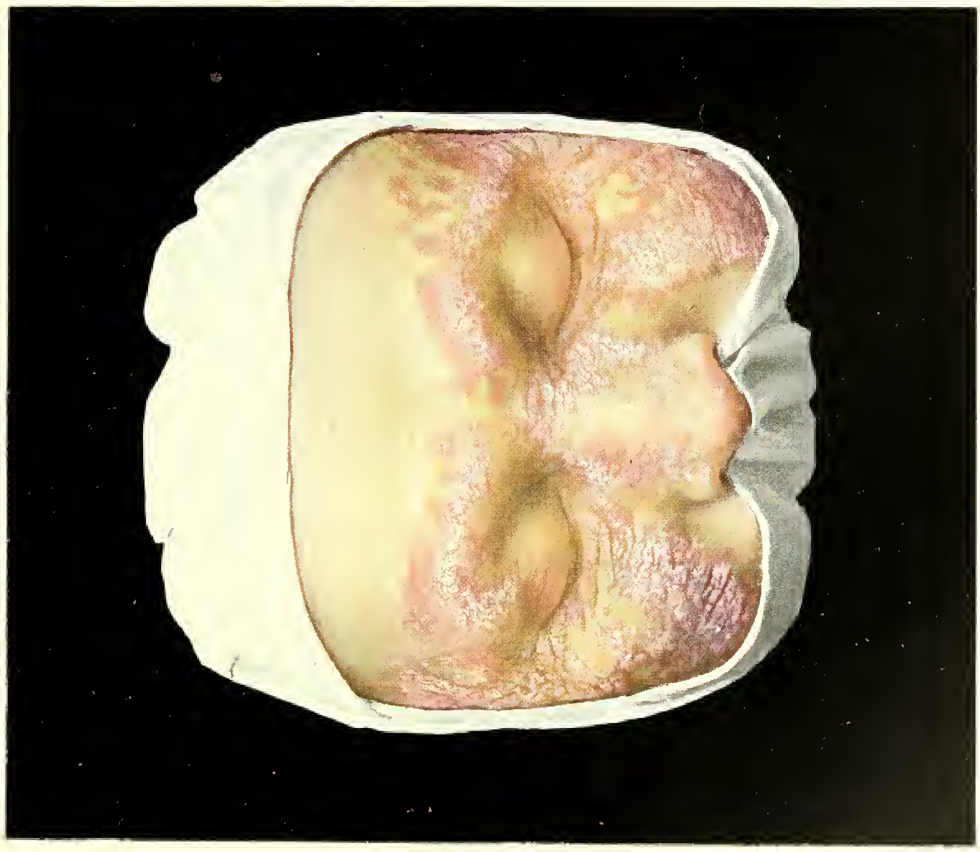
Lupus Erythematosus.

PLATES VIII., IX., FIGS. 13, 14, 15, 16.

In **Lupus erythematosus** the skin changes usually begin on the face (Fig. 13), on the ears (Fig. 14), or on the scalp (Fig. 16), more rarely on the extremities (Fig. 15); they originate as indeterminate red papules, which develop by peripheral extension to form patches with margins of bright red colour, covered by firmly adherent scales. These become greenish if of long duration and, if separated, show finger-like processes on their under-surface corresponding to dilated follicular ducts. At the margin comedo-like plugs are also often present which, however, are drier and not so fatty as true comedones. The process extends peripherically with extraordinary slowness, while cicatricial atrophic spots, often traversed by telangiectases, develop in the centre without the occurrence of ulceration. A bats-wing configuration frequently results from the favourite localization on the nose and cheeks. On the scalp the cicatricial atrophy gives rise to permanent alopecia.

The redness can be entirely dispelled by pressure; but on pressure with a lens the well-known nodules of Lupus vulgaris, from which this disease must be carefully distinguished, never appear. Sometimes chilblain-like lesions develop on the fingers, which may form rhagades and fissures, and cause considerable pain;





13. 14. Lupus erythematosus.

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15. 16. Lupus erythematosus.

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apart from this, the disease causes little or no subjective symptoms. Besides this form, which is called *Lupus erythematosus discoides,* there also occurs an acute form (*Lupus erythematosus disseminatus*), in which numerous efflorescences occur on the face and body, accompanied by violent general symptoms and fever, which involute after a short existence and never extend peripherically, as in the patchy form, but heal with the formation of scars. This last variety may either develop from discoid Lupus erythematosus, or may arise spontaneously, and is always a serious disorder. The causes of Lupus erythematosus are unknown, but in recent years an attempt has been made to connect the disease with tuberculosis by attributing its existence to the presence of toxins in parts of the body where tubercle bacilli do not exist; no proof of this theory has yet been adduced.

The **Diagnosis** of Lupus erythematosus may be based on its seat, the discoid shape of the lesions, the characteristic scaling, the dilatation of follicles, and the central atrophic scarring. The differential diagnosis from syphilis and Lupus vulgaris must first be established. The former is distinguished by the copious amount of infiltration and the coppery or burgundy-like colour of its elements, while other manifestations of syphilis are seldom absent. As regards Lupus vulgaris, the absence of nodules and ulcers is especially to be borne in mind. Psoriasis and mycotic diseases may be at once eliminated by the absence in them of atrophic scars.

The **Prognosis** must be guarded, as treatment is not always efficacious in the discoid forms; the disseminated form is a serious ailment, as has been already remarked.

Treatment.—As Lupus erythematosus usually recovers without deep destruction of tissue, although in no definite period of time, treatment must be adopted which prevents any implication of the deeper parts. External remedies which produce congestion and serous effusion often expedite the spontaneous tendency to recovery. Vigorous washing with soap, superficial application of the thermo-cautery, painting with tincture of iodine, and the inunction of sulphur or resorcin pastes, are often efficacious; but after each application a period of rest, with the employment of some indifferent salve or plaster till all reaction ceases, must be enjoined. Covering the part with mercurial plaster is often followed by good results. A long-continued course of quinine, with the simultaneous application of tincture of iodine frequently produces excellent effects, even in obstinate cases.

Figs. 13, 14, 16. Models in Neisser's Clinic in Breslau (Kröner).
Fig. 15. Model in Saint Louis Hospital in Paris (Baretta). Vidal's case. Symmetrical Lupus erythematosus of the hands, the face being similarly affected.

Lupus Vulgaris.

PLATES X., XI., XII., XIII., XIV., XV., FIGS. 17-26.

Lupus vulgaris is the most important disease of the skin produced by the migration of the tubercle bacillus into it—important both on account of its relative frequency, and of the severity of the changes and destruction of tissue produced by it ; in most, if not in all cases it is caused by inoculation from the outside. The primary lesion of lupus—the lupus nodule—first appears as a brownish or brownish-red spot, which becomes pale yellow on pressure with a glass or lens, and which lies completely in the true skin ; it is somewhat translucent, shiny and waxy, covered with intact epidermis, and several generally appear together in groups. Its consistence is softer than that of normal skin ; a probe firmly applied to the part generally penetrates to a depth of 1 to 2 millimetres (*L. vulgaris maculosus*, Fig. 17).

A slightly raised prominence results from the confluence of neighbouring nodules and their further growth in an outward direction (*L. tumidus*). The lupus nodules may now either disappear by fatty degeneration and absorption with some exfoliation, or may develop into ulcers bounded by smooth, soft margins, which are generally sharply demarcated, but are sometimes undermined. These ulcers present a more or less vigorously granulating surface, which bleeds easily, and is seldom covered with slough (*L. ulcerans*, Fig. 23). Hypertrophy is sometimes simu-

lated by burgeoning of the granulations (*L. hypertrophicus*, Fig. 19). If the granulations become covered by horny masses, as occurs chiefly on the fingers and toes, a warty appearance is produced (*L. verrucosus*, Fig. 26). The disease described by Riehl and Paltauf as *Tuberculosis verrucosa cutis* represents a form of Lupus verrucosus. Lupus serpiginosus (Fig. 23) is the result of healing in the centre and extension of the lupus nodules or ulcers at the periphery.

On the mucous membranes lupus shows itself as white, shiny nodules with a thickened epidermal covering, which soon disappears, so as to form lupus ulcers similar to those on the skin.

From the anatomical point of view lupus is always situated in the skin and subcutaneous tissues ; it never directly attacks fascia, muscles or cartilage ; these tissues can only be involved secondarily.

Lupus vulgaris most frequently occurs on the face, especially about the nose, where it causes an eroded appearance owing to absorption and shrinkage (Figs. 17, 18) ; it is specially characteristic of this condition that the nasal bones remain intact. The starting-point of the disease may be either the mucous membrane or the skin, and hideous mutilation may be produced (Fig. 22, destruction of the eyes, contraction of the mouth).

Not infrequently, however, lupus is localized on the extremities, where it may cause the destruction of portions of the fingers and toes, or even of entire fingers and toes by obliteration of the nutrient blood-vessels of those parts (*L. mutilans*, Fig. 25). The phalangeal bones may persist, and their dislocation inside scar tissue may be observed by X rays.

The course of Lupus vulgaris is extremely chronic ; the disease usually begins in early childhood, more rarely at more advanced periods of life. It spreads

18. Lupus vulgaris: Cornu cutaneum.

17. Lupus vulgaris.

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20. Lupus vulgaris.

19. Lupus vulgaris hypertrophicus.

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slowly, or gives rise to fresh deposits round about. The general health is often little or not at all impaired, although persons suffering from advanced lupus are more liable to general tubercular infection than healthy individuals. In the course of lupus tubercular infection of lymphatic vessels may occur, as the result of which 'cold abscesses' may form at various points, which may break externally, and from this results so-called scrophuloderma without lupus (*Gommes scrofuleux*, Fig. 26). The involvement of the afferent lymph channels as the result of erysipelas—which is not an uncommon complication—leads to the formation of elephantiasic growths on the genitals and extremities (Fig. 24), the lupus origin of which can only with difficulty be established after the healing of the lupus. A very malignant form of epithelioma develops in some cases on the top of lupus of many years' duration (Fig. 21) ; more rarely a benign new growth of epithelial origin may develop (*Cornu cutaneum*, Fig. 18).

Sometimes lupus exists secondarily to tubercular diseases of other tissues, more especially to old-standing affections of bones or glandular fistulæ, in which case the lupus nodules are generally present in cicatrices in the immediate neighbourhood of these lesions.

The **Diagnosis** of Lupus vulgaris is not difficult if typical nodules are present, especially when the part is examined by pressing a glass or lens on it, the nodules being thereby rendered manifest by the expression of the hyperæmia which conceals them. The result of exploration with a probe confirms the diagnosis. As nodules cannot be demonstrated in all phases of the disease, its extremely chronic course is worthy of special notice. Syphilis produces much more extensive and deeper lesions in a much shorter time. Other points of importance are—the onset of the

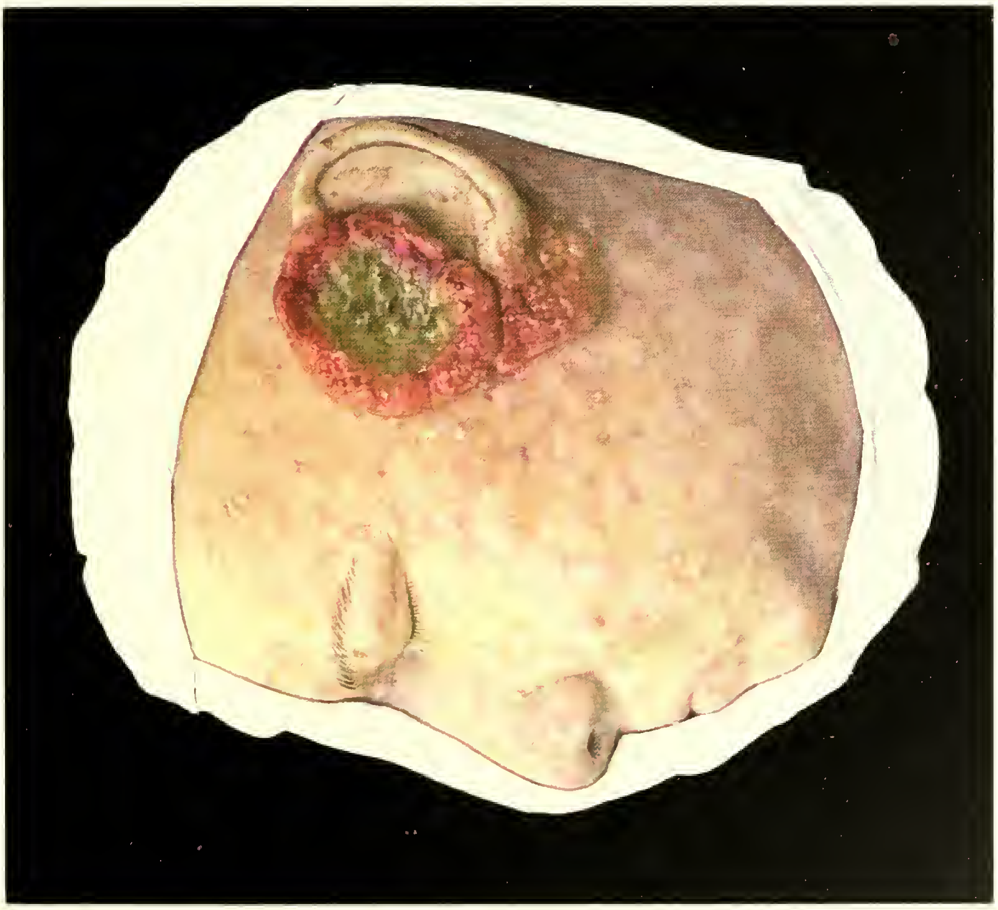
malady generally in youth, the absence of pain and lastly, the reaction to Koch's original tuberculin, which is an absolutely certain criterion.

The differential **Diagnosis** must be established from Lupus erythematosus (absence of implication of bone and of lupus ulceration), from Acne rosacea (lumpy swellings, but no lupus nodules), from Ringworm (microscopical demonstration of fungus, no ulcers), but especially from Syphilis, as already mentioned. This latter point is not always easy, but the inefficacy of antisyphilitic treatment, the special tendency for syphilis to attack bones, and the typical reaction of lupus to tuberculin, generally decide the question.

The **Prognosis** as regards life is favourable, apart from the occurrence of general tubercular infection, but as regards cure it is absolutely unfavourable in extensive cases. Permanently successful results have hitherto been attained only in recent, limited cases suitable for excision. We hope, however, in a few years to effect, by the use of Finsen's light, permanent cures even in severe cases of lupus which have hitherto been considered of the most dire nature, owing to the hideous disfigurement so often produced by them.

The results of **Treatment** depend in the first instance on early diagnosis. If the lupus infiltration is so circumscribed that it can be removed *in toto* without excessive loss of substance, radical extirpation is to be recommended just as if one were dealing with a malignant tumour; the loss of substance must be remedied by suture or by grafting. In more extensive lupus, or when the subcutaneous tissue and lymphatic vessels are extensively involved, this procedure gives

22. Lupus vulgaris.



21. Lupus vulgaris et Epithelioma.

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23. Lupus vulgaris serpiginosus.

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less certain and less beautiful results. By scraping, scarification, galvano-caustic, or galvano-cautery, or by hot-air treatment (which, however, often causes cheloid scars), either alone or combined with caustics, apparently good results may for a time be obtained, but recurrences almost invariably take place. The best caustic is arsenic in the form of arsenical paste, but it cannot well be employed over large surfaces on account of pain and intoxication; the same remark applies to pyrogallol in ointments from 2 to 10 per cent. in strength. Both remedies have a selective action—*i.e.*, they spare the sound and destroy the diseased tissue, but neither protects from relapses. Solid nitrate of silver, especially with the addition of nitrate of potassium to harden the nitrate stick, is of service for boring into nodules covered with epithelium, or may, in strong solutions, be used for ulcers, but its effects are generally too superficial. Chloride of zinc and caustic potash are deeply penetrative and energetic remedies, but they destroy also sound tissue. Lupus ulcers may heal well under 1 per thousand corrosive sublimate, or 2 per cent. permanganate of potash dressings, but the results are not permanent.

Lupus of mucous membranes can be advantageously destroyed by cauterization with lactic acid, or by thermo- or galvano- cautery. The injection of tuberculin, or of tuberculin and resorcin, cannot effect the cure of lupus.

All the foregoing methods produce definite cure only in a small number of cases and after very prolonged use. Better results appear sometimes to be attained by treatment with Röntgen rays until scabbing is produced; but this method has not hitherto been generally adopted, on account of its very prolonged duration and the sclerodermic changes in the skin which sometimes result from it.

Undoubtedly the best results in extensive cases of lupus, both from the cosmetic and actually curative points of view, have been obtained by Finsen's treatment with concentrated sunlight, or by strong electric light from which the heat rays are eliminated. To judge by the results obtained by Finsen himself, the greater number of cases, even of protracted duration, which formerly would have been considered incurable may, by this means, be brought to a really perfect cure, and with the best imaginable cosmetic results, so that the possibility of completely eradicating lupus is not to be completely rejected. Unfortunately, the general adoption of the Finsen treatment has hitherto been rendered very difficult by the high price of the installation, the expense of the treatment, and by its long duration. None of the cheaper apparatus designed to replace Finsen's original apparatus (Lortet and Genoux, Bang, the Dermo lamp, Foveau and Trouvet) have, despite the great expectations founded upon them, succeeded in surely effecting the cure of lupus; so that up to the present the erection of public institutes provided with Finsen's original apparatus must be considered and advocated as the most potent weapon against this terrible malady.

General recuperative treatment must be adopted in lupus as in tubercular affections of internal organs.

Figs. 17, 23. Models in Neisser's Clinic in Breslau (Kröner).
Figs. 19, 23, 26. Models in Neisser's Clinic in Breslau (Kröner).
Fig. 18. Model in Saint Louis Hospital in Paris (Baretta). Guibout's case.
Fig. 22. Model in Neisser's Clinic in Breslau (Kröner).
Figs. 20, 25. Models in Neisser's Clinic in Breslau (Kröner).
Figs. 24, 26. Models in Neisser's Clinic in Breslau (Kröner).
Fig. 21. Model in Saint Louis Hospital in Paris (Baretta). Besnier's case. Male, aged fifty-one; disease of twenty-two years' standing, only slightly treated, and especially never with thermo-cautery.

24. Lupus vulgaris; Elephantiasis consecutiva.

25. Lupus vulgaris; Mutilatio.

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26. Lupus vulgaris verrucosus; Lymphangitis tuberculosa.

27. Verruca necrogenica.

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Verruca Necrogenica.

Post-mortem Wart.

PLATE XV., FIG. 27.

Not infrequently there are present on the hands of anatomists, pathologists and post-mortem room servants peculiar brown or grayish-black hard growths, with reddened and somewhat inflamed surrounding tissue. The affection, which results from the inoculation of tubercle bacilli, is generally quite benign and superficial; only seldom can its transformation into lupus or extension into deeper tissues (lymphatics, tendons) be observed. Spontaneous cure frequently occurs.

The **Differential Diagnosis** has usually only to be established from common warts, in which there is no surrounding inflammatory zone; their surface is also generally more uniform than that of post-mortem warts.

The **Prognosis** is almost always favourable.

Treatment must be chiefly surgical. In very extensive cases the question of destruction by Light treatment may be worthy of consideration.

Fig. 27. Model by Professor Jacobi in the Freiburg Clinic.

Lichen Scrophulosorum.

Tuberculosis Milio-papulosa Aggregata.

Plate XVI., Fig. 28.

On the trunk, and less frequently on the limbs of persons suffering from tuberculosis of the skin, bones or glands, there develop (usually unnoticed by the patient) numerous yellow or yellowish-red, acuminate, small papules, sometimes in groups, at other times scattered indiscriminately. These papules, after lasting for some time, develop a small scale on their surface, and if present in larger numbers, coalesce to form scaly, rough, yellowish-brown patches (Fig. 28). The eruption, which generally occurs in young persons, causes no subjective symptoms ; only seldom does the transformation of the papules into pustules or acneiform pimples occur. The disease is undoubtedly of tuberculous nature, as shown by reaction to tuberculin, the anatomical structure of the miliary tubercles, and the discovery of bacilli in them ; but it is caused by bacilli of slight virulence. The intensity of the eruption varies according to the condition of the underlying tubercular disease.

The **Diagnosis** can be determined with ease on the existence of the typical papules and the co-existence of a tubercular basis, or ultimately on the occurrence of reaction to (the original) tuberculin.

The **Differential Diagnosis** need only be established from the small papular syphilide, which can be eliminated by the failure of antisyphilitic treatment.

The **Prognosis** is favourable.

Treatment must first be directed towards combating the original tuberculosis, and may be assisted by inunctions of cod-liver oil, or preferably, by weak chrysarobin ointment, which soon brings about a cure, without leaving any traces.

Fig. 28. Model in Neisser's Clinic in Breslau (Kröner). A pale, weakly, eight-year-old boy, with flat chest, enormous submaxillary glands, phlyctenular conjunctivitis, and suspected right-sided apical pulmonary catarrh.

Erythema Induratum Scrophulosorum.

(*Bazin*).

PLATE XVI., FIG. 29.

In young scrofulo-tubercular subjects, more frequently in the female than in the male sex, there are sometimes present on the legs hard, red or bluish-red, densely infiltrated nodules, which develop unnoticed, as they cause neither pain nor itching; these sometimes break and discharge their strikingly yellow-coloured contents. Either after or without rupture the nodules, which are of extremely long and persistent duration, are slowly absorbed, leaving behind deep pigmentation, while at the same time new lesions may develop. They are situated in the true skin and subcutaneous tissue; their margins are well defined; infiltrated areas as large as the palm of the hand may result from their extension and confluence. There is an undoubted connection between this disease (which is of greater frequency than is generally recognised) and tuberculosis, but the existence of tubercle bacilli in it has not yet been demonstrated. Deeper invasions of tissue do not occur.

Treatment must first be directed to the tubercular origin of the disease. Local treatment is generally unnecessary and futile.

Fig. 29. Model by Professor Jacobi in the Freiburg Clinic. A medical man, twenty-nine years of age, who suffered seven years before from apical tuberculosis successfully treated in a resort. The disease on both legs had existed for many years.

No. 29. Erythema induratum scrophulosorum (Bazin).

No. 28. Lichen scrophulosorum.

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Lepra. Leprosy.

Elephantiasis Græcorum.

Plates XVII., XVIII., Figs. 30, 31, 32, 33.

Leprosy is a general infective disease, known even in very ancient times as a contagious malady, which was very widely distributed till the Middle Ages. At the time of the Crusades, however, it was forced into the background by the advance and extension of syphilis, and now its occurrence is extraordinarily diminished, so that it exists with frequency in the tropics only, and is scattered sporadically over Europe (Norway, Russia, Greece, with a small area near Memel). We draw a distinction between *tubercular leprosy* and *nerve leprosy*, according to the localization of the causative agents of the disease—viz., the lepra bacilli discovered by Hansen and Neisser—whether in the skin or in the nervous system. Not infrequently 'mixed forms' also occur.

In tubercular leprosy, along with the symptoms of a general infective process—fever and prodromal exanthemata—nodules and infiltrated areas of varying size gradually form, over which the skin is usually brown and shiny, or sometimes may present an eczematous or psoriasiform appearance. The commonest localization—viz., on the face—produces the early falling of the eyebrows and thickening of the facial folds, which go to make up the so-called *facies leontina*

(Fig. 30). The nodules may be absorbed after long existence, or may form indolent ulcers, healing with great difficulty (Fig. 31), common on the mucous membranes, which are frequently involved. It seems that the mucous membranes are often the starting-point of the skin disease; at least, it is stated in many quarters that the primary lesion exists most frequently in the nostril.

If the disease is of long duration, the peripheral nerves generally are involved, and, finally, the internal organs also. After illness extending over years, death occurs, but previously blindness often results from destruction of the cornea or of the entire eyeball.

In nerve leprosy the morbid changes are referable to primary disease of the peripheral nerves. Hyperæsthesia, anæsthesia, and paræsthesiæ may generally be observed in the earlier stages. The nerve strands which lie close beneath the skin appear thickened like cords. At the same time there are changes in pigment distribution, sometimes corresponding to the irregularly distributed anæsthetic areas, sometimes independently, while atrophies and paralyses of muscles occur, especially in the face and hands—the so-called 'clawed hand' (Fig. 33).

Frequently ulcers form as the result of trophic disturbances or of injuries and burns, which are not perceived owing to anæsthesia (*e.g.*, 'perforating ulcers,' Fig. 32), and more extensive destruction of the skin may give rise to mutilation and amputations of fingers and toes.

Although the course of tubercular leprosy is very chronic, and, on the average, lasts from eight to ten years before death ensues, that of pure nerve leprosy and of the mixed forms is even much slower. In such cases a duration of twenty to forty years is not very exceptional.

30. 31. Lepra tuberosa.

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33. Lepra anaesthetica.

32. Lepra; Malum perforans pedis.

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In fully developed tubercular leprosy the **Diagnosis** is not difficult, and may be confirmed by microscopical demonstration of the bacilli; the history of residence in the tropics or in a leprous district is to be taken into consideration. On the other hand, the diagnosis of nerve leprosy is not easy, especially from certain diseases of the spinal cord; the swelling of the peripheral nerves is of diagnostic importance. In the mixed forms all these points must be considered.

The **Prognosis** is absolutely unfavourable.

Treatment has hitherto yielded no uniformly favourable results. Salicylate of soda, Chaulmoogra oil, with baths and regular hygienic measures applied to the skin, must be tried. The most important measure is prophylaxis by the segregation of lepers, which has enormously reduced the frequency of the disease in Norway, and has been introduced into Germany in a modified degree.

Figs. 32, 33. Models in Neisser's Clinic in Breslau (Kröner). The daughter of a fisherman from the neighbourhood of Memel, aged seventeen, with disturbances of sensibility; wasting, especially of the arms and legs, noticed for a year and a half; pigmentary and blanched areas on the trunk; atrophy of the hands, especially of the thenar, hypothenar, and interosseous muscles.

Trichophytia. Ringworm.

Plates XIX., XX., XXI., XXII., Figs. 34-40, and 41.

Under the name of Trichophytia (*Anglicè*, 'ringworm') are included a number of diseases due to the presence in the horny structures of the skin (epidermis, hair, nails), or sometimes in the deeper layers, of Hyphomycetes. The unity of species of these hyphomycetic fungi was formerly unanimously accepted, but cannot now be maintained. There is at least one fungus, the cause of Gruby's disease (*Mikrosporia, 'small-spored ringworm'*), which is definitely characterized clinically, and must be carefully differentiated from other trichophyta according to Sabourand's researches. In Germany this disease may be said not to exist, but in England and France it forms the great majority of all cases of ringworm. The affected individuals are almost exclusively children under fifteen years of age. The seat of the disease is generally the scalp, where more or less numerous, round or oval patches are present, over which the hair is broken and stumpy, the scalp itself being covered with white or grayish, firmly adherent scales, here and there pierced by hairs (Fig. 36). Inflammatory phenomena are very slight, and may apparently be absent. This very obstinate complaint usually recovers spontaneously when the patient attains the age of fifteen years.

The principal seat of Trichophytia, properly so-called, is the outer layer of the skin. Here there

34. Trichophytia annularis (iris).

35. Trichophytia profunda.

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36. Trichophytia capillitii (Mikrosporia).

37. Trichophytia profunda capillitii (Kerion Celsi).

38. Trichophytia unguium.

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occur circular areas, accompanied by considerable inflammatory phenomena, and generally with marked itching, which display either a ring of vesicles at the margin—giving rise to the unfortunate name of Herpes sometimes applied to them—or desquamating, scaly patches, which spread centrifugally (*Trichophytia annularis*, Fig. 34). While the process retrogrades in the centre, it extends at the periphery and forms serpiginous figures by the confluence of neighbouring circles. While the disease progresses recrudescences may occur in the centre of the patches, so that beautiful concentric rings may be formed (*Trichophytia iris*, Fig. 34). Most frequently the face, neck and hands are attacked, but the disease may be situated upon any other portion of the body. On the scalp and in the beard the appearances are identical, but bald, tonsure-like spots result from fracture of the hairs close to their roots. Owing to irritative, eczematous changes, the disease described as *Eczema marginatum* may result.

While these phenomena are due to the presence of the fungus in the upper epidermic layers, its migration into the hair-follicles of the scalp or beard causes much more severe changes. In the conditions denominated *Trichophytia profunda* (Fig. 35), *Sycosis parasitaria* (Fig. 40), and *Kerion Celsi* (Fig. 37), which almost exclusively affect hairy parts, hard, firm, irregular lumps and nodules form, or even dense infiltrations and abscesses (Fig. 39), penetrated by dilated hair-follicles, and may exhibit a peculiar scar-like appearance; these sometimes attain considerable dimensions. Finally, the hairs disappear by destruction of the follicles, and the affection heals very slowly, generally with the formation of scars.

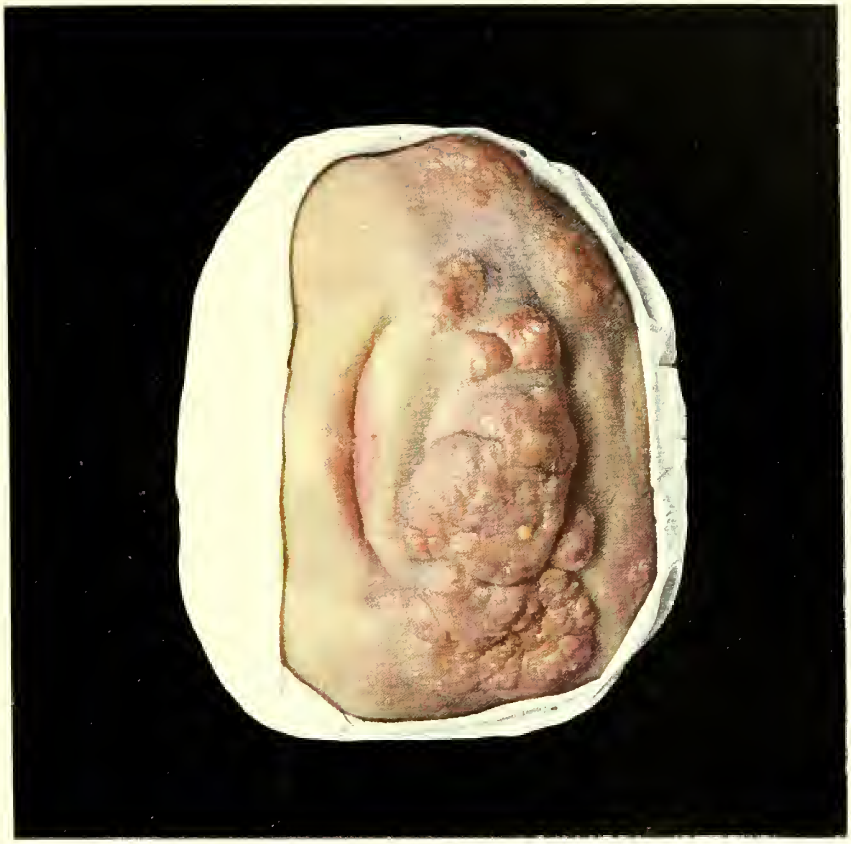
We have to consider as a last form of Trichophytia of the skin a disease produced by an acute invasion of

fungus over large tracts of skin. This form may either begin as a solitary trichophytic disc (*Médaillon primaire, Herald patch*), which may exist for a long time, or may develop without it. From numerous pale-red little papules round, or more generally oval, discs form, some as large as a shilling, which coalesce very freely, and exhibit centrifugal desquamation at the margin. The process is extremely superficial, and spontaneous recovery usually occurs in the course of some weeks. This disease is termed *Herpes tonsurans maculosus*, and is identical with the *Pityriasis rosea* of Gibert. Its favourite seats are the neighbourhood of the neck, the chest, and back ; less frequently the abdomen and limbs are affected (Fig. 41).*

Invasion of the nails may show itself under different aspects. The substance of the nails is rendered opaque, becomes brittle and of brownish colour, and their shape is altered, with formation of furrows, ridges, etc. At the margins they easily shell off (Fig. 38).

The **Diagnosis** of the various forms of ringworm offers no difficulty when the fungus can be microscopically demonstrated, either by staining or after mere soaking in liquor potassæ. The mycelia appear under the microscope as bright, segmented and dichotomous figures, with double contours. Culture experiments may also be employed for confirming the diagnosis. As, however, the existence of the fungus

* Professor Jacobi follows the custom prevalent in Germany and Austria of considering pityriasis rosea a form of ringworm. He informs me that he has succeeded in staining a fungus by Boeck's method in one case ; the fact is, as far as I am aware, an isolated one. Numerous observers in France and Great Britain—among whom I may include myself—have failed to find any trace of trichophyton or other fungus, and are agreed in thinking that this curious disease is in no way connected with ringworm. The differential diagnosis of the two diseases is, indeed, of the highest practical importance.—J. J. PRINGLE.



40. Trichophytia profunda barbae (Sycosis parasitaria).

39. Trichophytia profunda nuchae.

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cannot always be demonstrated in all stages, other points worthy of observation are: the localization, the circular form, the superficial situation, and the centrifugal desquamation at the margin of the patches. The tonsure-like spots over which the hairs are broken off, and the dusky appearance of the diseased hairs, especially after treatment with chloroform, may be considered as diagnostic in the scalp and beard.

As regards **Differential Diagnosis,** psoriasis must first be considered. In psoriasis the scales are larger, more brilliant, and, as a rule, punctiform hæmorrhages occur after their removal with the nail, while psoriasis generally itches less than ringworm. Certain forms of eczema may exhibit similar outlines, but they are seldom so definite; the discharge from an eczema may also facilitate the diagnosis. Syphilides show deeper infiltration, and are of darker colour. Lupus erythematosus may be distinguished by the invasion of the sebaceous follicles, as well as by the cicatricial atrophy in the centre. Parasitic sycosis of the beard is to be differentiated from the non-parasitic form chiefly by the greater amount of infiltration and its deeper localization. In its earliest stages favus may sometimes present very similar appearances to ringworm, but after a certain time scutula always form. On the scalp the two maladies are often very difficult to distinguish, especially if favus has been previously treated, but the point is not one of very great practical importance. It is important to bear in mind that in favus the fungus usually is present in considerably greater abundance than in ringworm.

The **Prognosis** is generally favourable, but the disease in the beard and on the scalp is particularly obstinate.

Treatment.—Cure can easily be obtained, when the disease affects merely the epidermis of glabrous parts, by means of bactericidal substances, or such as produce vigorous separation of the epidermis. Thus, tincture of iodine, the inunction of sulphur soap, or of Kaposi's naphthol ointment, attain this object without difficulty in the vesicular and squamous varieties, and the latter is efficacious in pityriasis rosea, which also yields easily to treatment with pastes or powders. The principal anti-mycotic remedies in use are chrysarobin, pyrogallol, or a 1 per cent. solution of corrosive sublimate in tincture of benzoin. Tar, either pure or in the form of Wilkinson's ointment, acts very usefully. The treatment of the deep-lying ringworms is much more difficult; in them poultices may be recommended, followed by compresses of a 1 per cent. solution of acetate of aluminium or resorcin. In later stages chrysarobin, Brooke's paste, or corrosive sublimate, may prove of good service. Epilation must always be practised, and must be a preliminary to the treatment of ringworm of the scalp; afterwards inunction of chrysarobin, painting with tars, solutions of corrosive sublimate or tincture of iodine, ointments of sulphur or croton oil, may all be tried. Lastly, 'Light treatment' may effect a cure, although often only after a very long time.

Fig. 34. Model in Neisser's Clinic in Breslau (Kröner).
Figs. 35, 37, 40. Models in Neisser's Clinic in Breslau (Kröner).
Fig. 36. Model by Professor Jacobi in the Freiburg Clinic.
Fig. 38. Model in Lassar's Clinic in Berlin (Kasten).
Fig. 39. Model in Saint Louis Hospital in Paris (Baretta). Vidal's case.
Fig. 41. Model in Neisser's Clinic in Breslau (Kröner).

Erythrasma.

Plate XXII., Fig. 42.

Erythrasma shows itself as accurately marginated patches of brown or brownish-red colour, with convex outlines and finely desquamative surface, the peripheral portions of which are slightly reddened. They occur principally on the inner sides of the thighs close to the genitals, on the scrotum, labia majora and perinæum, and on the adjacent portion of the abdomen; they may also attack the armpits and thence spread to the chest and trunk. It is caused by a mycelium, the *Microsporon minutissimum*, and it is always very superficially situated in the epidermis. The disease is obstinate, although absolutely harmless.

The **Diagnosis** is easily made on the grounds of its localization, colour and fine desquamation.

The **Treatment** is similar to that of the superficial forms of ringworm.

Fig. 42. Model in Kaposi's Clinic in Vienna (Henning).

Pityriasis Versicolor.

PLATE XXIII., FIG. 43.

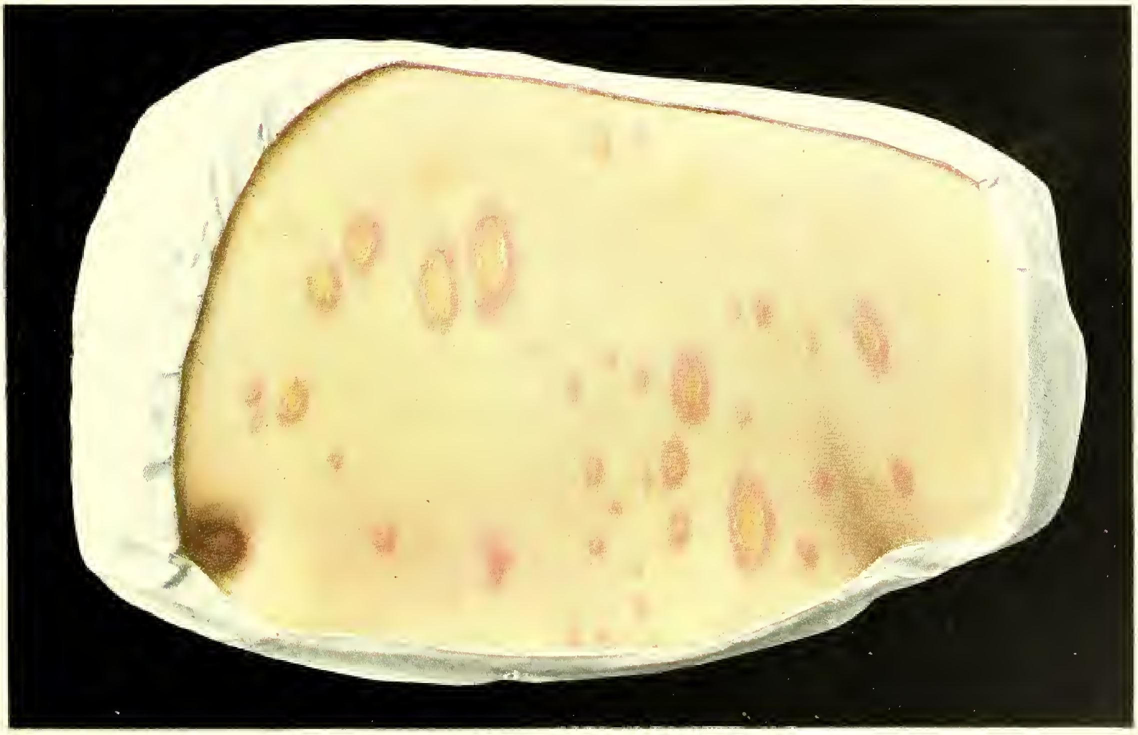
Pityriasis versicolor occurs more especially in persons who sweat freely, and therefore very frequently in the phthisical. It shows itself as small yellow or brownish spots, which sometimes are arranged in confluent patches, and are caused by the invasion of the epidermis by the *Microsporon furfur*. The individual spots are very superficial, only slightly elevated, and rarely somewhat reddened at the edge. The branny desquamation is most marked when the spots are lightly rubbed ; there is never coarse scaling. If the part is scratched, the entire diseased corneal layer is removed in the form of a thin pellicle, and the nearly normal subjacent skin is exposed. The disease chiefly affects the trunk, whence it sometimes spreads over the limbs and neck ; the face, palms and soles are, however, always free.

Subjective symptoms are, as a rule, completely absent, so that the malady is often unnoticed.

The **Diagnosis** can be made with facility from the yellow colour and localization of the disease, and by the possibility of removing the spots by scratching. It can be confirmed by the detection under the microscope of the network of mycelium and numerous clumps of brightly refractive spores.

The **Prognosis** is favourable.

No. 42. Erythrasma.



No. 41. Pityriasis rosea.

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43. Pityriasis versicolor.

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Treatment easily produces temporary favourable results, but a permanent cure is obtained only with difficulty. All antimycotic remedies may be used with benefit, as may inunctions of sulphur soap, painting with alkaline spirit of soap, sometimes with the addition of 1 per cent. of naphthol; or baths followed by lotions of corrosive sublimate, naphthol, etc., may be used. The best results we have obtained have been with the treatment recommended by Besnier, consisting of the alternate inunction of salves containing 1 to 3 per cent. of resorcin and salicylic acid, and 5 to 15 per cent. of sulphur.

Fig. 43. Model in Neisser's Clinic in Breslau (Kröner).

Favus.

PLATE XXIV., FIGS. 44, 45.

Favus is most commonly present on the scalp in children, and is characterized by the formation of so-called 'favus cups' (or *scutula*); these are saucer-like, yellow or sulphur coloured, hollowed discs, which are composed of thickly welded masses of *Achorion Schönleinei*—the causative fungus of the disease—mixed with detritus and epithelium, covered with a thin coat of the horny layer, and perforated in the centre by a hair (Fig. 44). After the scutulum is removed, a shallow depression is perceptible, which, as the result of the exposure of the rete Malpighii, is moist and glistening. After some time has elapsed the favus cups coalesce to form whitish, mortar-like masses (*Favus confertus*), which in some cases involve the greater part of the scalp, and only show the mode of formation of the composite patches by some scattered cups at their margin. Over the affected areas the hairs are lustreless, as if powdered, and the disease exhales a musty, mouse-like odour. Its course on the scalp is extremely chronic, and in the majority of cases, terminates in cicatricial atrophy, as the result of pressure by the favus cups, with permanent alopecia of the affected parts.

The affection occurs more frequently on the scalp than on the body, where circles first appear, either covered with scales, or showing vesicles at their

45. Favus scutularis et herpeticus.

44. Favus scutularis.

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margin, and these exactly resemble the lesions produced by trichophytia ; only after protracted duration do they exhibit one or more scutula in the centre (Fig. 45). On the skin of the body the disease is not at all obstinate, and recovers without leaving any marks.

In rare cases the favus fungus may penetrate deeply, and evoke a condition analogous to kerion. The nails may also suffer in the same way as in ringworm ; occasionally cup-like lesions are found embedded in the nail substance.

Recent investigations have proved, contrary to the views of Quincke, Unna and others, that favus is in all probability caused by one form of fungus only, which may assume different developmental forms on different media. Animals (*e.g.*, cats and mice), which are susceptible to invasion by favus, are often the starting-point of the disease in man.

The **Diagnosis** is generally easy in presence of the favus cups, which become of an intense yellow hue when moistened with alcohol, or after microscopical demonstration of the fungus. The powdery appearance of the hairs and the musty odour are also points of importance. Even after favus has terminated, the cicatricial atrophy of the scalp may establish a retrospective diagnosis.

The **Prognosis** is favourable on the body, but on the scalp it must be very guarded, as permanent alopecia is usually the ultimate result of the disease.

Treatment has for its first object the removal of the scutula, which may be effected by an oil-cap ; then energetic epilation must be instituted, and in very extensive cases this may be done by the applica-

tion of the calotte under an anæsthetic. Afterwards regular washing with soap and the subsequent use of chrysarobin, tincture of iodine, sublimate spirit or ointment, or naphthol may be recommended. Tar, ichthyol, and tumenol are used with good success. Treatment by X rays appears to yield excellent results, but must be employed with the greatest caution on account of the risk of X ray burns.

Figs. 44, 45. Models in Neisser's Clinic in Breslau (Kröner).

PART 2.

PORTFOLIO

OF

DERMOCHROMES

BY

PROFESSOR JACOBI

Of Freiburg im Breisgau.

English Adaptation of Text

BY

J. J. PRINGLE, M.B., F.R.C.P.

Physician to the Department for Diseases of the Skin at the Middlesex Hospital, London.

LONDON.

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1903.

NUMBERED LIST OF SUBJECTS FOR PART II.

Psoriasis Vulgaris.

PLATES XXV.-XXVIII., FIGS. 46-52.

By Psoriasis we understand a chronic, nearly always incurable, disease of the skin, the cause of which is unknown—but is very probably of fungous origin—and in which relapsing outbreaks of eruption alternate with intervals of more or less freedom. The primary lesions are typical and consist of small points, the size of a pin's head, which soon become covered with firmly adherent scales. As they develop and spread, all the different forms of *Psoriasis guttata*, *nummularis*, etc., arise ; when healing occurs in the centre, *Psoriasis annularis* results, and when neighbouring circular patches run together the condition is called *Psoriasis gyrata vel figurata* (Fig. 48). The localization, chiefly on the extensor sides of the extremities and on the scalp, is characteristic of psoriasis, as is the production of small, punctiform, bleeding points in the exposed, moist, red and shiny rete Malpighii, after the scales are rubbed off. Lastly, the absence of any dense infiltration is typical, in contradistinction to other similar diseases, especially scaly syphilides. Deviations from the general rule as to distribution occur, however, not infrequently and there is no part of the skin which may not occasionally be the seat of the eruption. Even on the palms and soles psoriasis may exist, not only in universal attacks, but also in localized cases, so that it is highly desirable to dis-

continue the use of the name *Psoriasis palmaris et plantaris* as designating papulo-squamous syphilides of the palms and soles (Fig. 52). Mucous membranes are hardly ever involved in psoriasis. The so-called *Psoriasis mucosæ oris* has no relationship to true psoriasis, and is better named *Leucoplakia.*

Very marked changes may be observed in the extremely chronic course of psoriasis without any treatment, a circumstance which greatly prejudices our judgment as to the value of all therapeutic measures. Frequently eczematous complications occur. Considerable differences may be observed not only in the shape and size, but also in other attributes of the psoriatic lesions; thus the characters and thickness of the scales vary greatly, and thick mortar-like or oyster-shell-like masses may be present side by side with comparatively thin scales; while all shades of colour may coexist, from a pure glistening mother-of-pearl white to a dark, grayish-yellow or gray tint (Figs. 46, 47, 50). In the same way the intensity and width of the red band which bounds the scales vary; sometimes it is of a yellow rather than a red colour, while on dependent parts a more livid tint may predominate.

The seats of predilection are, as already stated, the backs of the elbows, fronts of the knees and the scalp, but in other cases the disease is much more widely distributed and may involve the greater part of the integument. In acute cases scarcely any region may remain unaffected (Fig. 51), and in these circumstances severe general symptoms may develop, whereas in localized cases the general health is unaltered. It is a generally recognised fact that psoriatics are frequently robust, well-nourished individuals. In the chronic forms trifling itching is, as a rule, the only subjective symptom present, but

46. Psoriasis vulgaris guttata et ostracea.

47. Psoriasis vulgaris.

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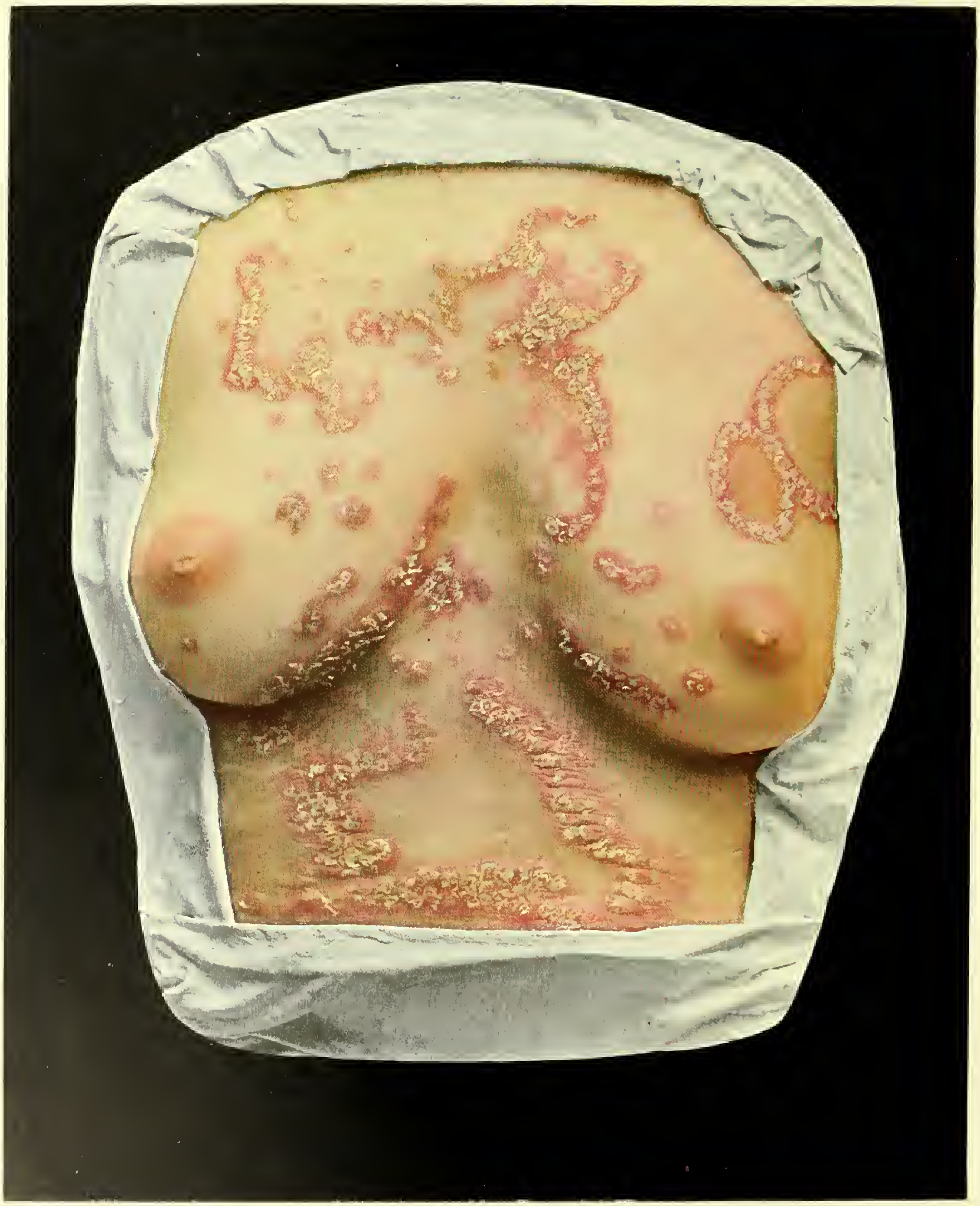

48. Psoriasis gyrata et serpiginosa.

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in acute and extensive outbreaks a troublesome feeling of thirst is often complained of.

The involvement of the nails ought also to be mentioned, these organs becoming dulled at the lunula, brittle and often shed.

The **Prognosis** is so far favourable that only in exceptional cases is there any deterioration in the general health, and individual eruptions can be cured. A definite, final cure of psoriasis is, however, impossible.

Differential Diagnosis.—Syphilis, eczema seborrhoicum, lupus erythematosus, true eczema and ringworm must first be considered.

Ringworm may be eliminated by the absence of fungus and its acuter evolution. In contradistinction to lupus erythematosus, psoriasis never leaves scars, and does not invade sebaceous follicles. Eczema seborrhoicum corporis (*Lichen circumscriptus* of Willan) generally displays smaller and more fatty scales with brighter yellowish-red coloration, and its typical distribution is on the chest and back. The differentiation from simple eczema is more difficult, chiefly because combinations of the two maladies occur. As a rule the localization and the fact that true psoriasis never weeps, as well as the determination of the elementary lesions of either disease, suffice to establish a diagnosis. Syphilis attacks most frequently flexor surfaces, and its papulo-squamous lesions —which only need to be considered here—are accompanied by dense infiltration. In syphilis, too, itching is absent, but in dubious cases the effects of treatment will be decisive.

Treatment may be either by internal or external means. The most important internal remedy

is arsenic, which, if properly employed, almost always brings about the recovery of psoriasis spots, but with deep pigmentation. It may be used in the form of 'Asiatic pills,' or of subcutaneous or intramuscular injections of the liqour sodii arseniatis. Iodine is not so certain a remedy, but is efficacious in a number of cases, provided it is prescribed in the form of iodide of potassium and in full doses. Other drugs (thyroid gland, etc.) have been proved to be uncertain in action or quite futile.

The first object of external treatment is the removal, after maceration, of the scaly masses. Baths, soaping and washing, salicylic ointment and superfatty soaps, alcohol sprays or compresses, with frequent ablutions, soon produce the desired effect. Reducing and slightly irritating remedies must be applied after the removal of the scales. Chrysarobin stands in the first rank, and may be used in the form of weak ointments (2 to 5 per cent.) once or twice daily until slight irritation of the skin is caused. As the drug varies greatly in quality and consequent effect, it is well to use only preparations which, after prolonged use, cause some degree of dermatitis. Chrysarobin ought not to be used for the face and scalp, on account of the ugly discoloration of the skin and hair it produces, as well as of its irritating effect on the conjunctiva. If chrysarobin irritation sets in, or even threatens to do so, the remedy must be at once discontinued and treatment by indifferent soothing ointments, pastes or tars substituted. Chrysarobin stains the normal skin a dark-bluish or brownish-red colour, in the midst of which the diseased parts appear pale, and chrysarobin staining only disappears when recovery is complete. The drug may be applied to localized spots dissolved in chloroform (10 per cent.), traumaticin being afterwards painted over them.

49. Psoriasis vulgaris unguium.

50. Psoriasis vulgaris rupioides.

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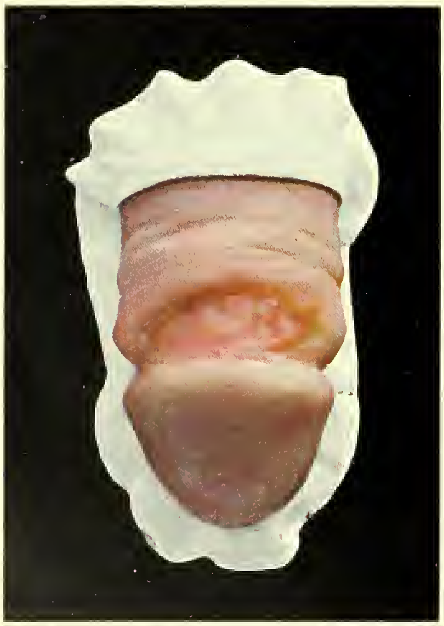

51. 52. Psoriasis vulgaris.

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Pyrogallol produces similar, but not such satisfactory, results; it may be employed in the form of a 5 per cent. ointment, but ought never to be used over more than one-fifth of the surface of the body at a time, on account of the risk of poisoning.

Tar is employed, principally in the form of tar baths, tar oil or tincture of tar, and is specially recommended for psoriasis of the scalp. Similar but milder in its action is the liquor carbonis detergens, which is applicable to uncovered parts, owing to its slight smell and colourlessness. A 10 per cent. white precipitate ointment, to which 10 to 20 per cent. of liquor carbonis may be added, is in common use for the treatment of the face. Specially obstinate psoriasis spots often disappear under eugallol—a pyrogallol derivative—which is applied mixed with 2 parts of acetone, and covered with zinc paste or dusting-powder.

It can, however, only be used for single small patches Regular hot baths with sulphur, ordinary warm-water bathing or hot-air baths, help other treatment; sea-baths are often deleterious. If eczema is present, it must first be cured before the treatment of the psoriasis is undertaken.

Fig. 48. Model in Lesser's Clinic in Berlin (Kolbow).

Figs. 46, 47, 49, 50, 51. Models in Neisser's Clinic in Breslau (Kröner).

Fig. 52. Model in Neisser's Clinic in Breslau (Kröner). A man, thirty-four years of age who, in the course of a rather extensive cruption, had manifestations on the palms and soles.

Lichen Planus.

PLATES XXIX.-XXXI., FIGS. 53-57.

Under the term Lichen are included those diseases, the primary lesion of which is represented by a small papule which undergoes no further development. Properly speaking, therefore, only two affections come into consideration — viz., *Lichen ruber planus*, and *Lichen acuminatus*. The latter is a very rare disease, first observed by Hebra, in which numerous, red, pointed papules occur, tipped by horny caps, which may run together to form rough, grater-like patches. As the disease spreads the nails are involved, the hair falls, and the earliest described cases proved fatal, with all the characteristics of a severe general malady. It is uncertain whether this type of disease still exists, or whether its serious results are now warded off by the arsenical treatment introduced by Hebra.

The great majority of lichen cases now observed are examples of Lichen planus, the elementary lesions of which consist of minute papules, sometimes as large as a hempseed, but occasionally larger; they are waxy-looking and shiny, and of bright-red colour; they are generally smooth on the surface, accurately delimitated and polygonal, while sometimes they are crested with a firmly adherent scale. When numerous papules run together the skin presents peculiar, raised patches. Involution is accompanied by deep pigmentation, and often begins in the centre, while the process spreads

53. Lichen planus.

54. Lichen planus atrophicus.

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at the margin, so that the skin assumes the appearance of shagreened leather. Intense itching is the most prominent subjective symptom; it gives rise to scratching and thus to narrow linear bands, which appear to be made up of lichen papules in close apposition. Lichen papules also may exist, arranged in the most diverse manners, sometimes being in rings, or in net-like patterns, or in circles (*Lichen annularis*, Fig. 55). After long duration a peculiar warty appearance may be assumed, especially upon the legs (*Lichen verrucosus*, Fig. 56). The disease, which is a very chronic one, generally occurs in successive outbreaks, and disappears very slowly, sometimes leaving atrophy of the parts occupied by papules (*Lichen atrophicus*, Fig. 54). The affection is frequently localized on the flexor surfaces of the extremities (Fig. 53), but any part of the body may be attacked, even the mucous membranes (Fig. 57), on which the lesions appear as whitish, silvery, glistening patches with thickened epithelium. Their occurrence on the penis is noteworthy, either alone or in conjunction with a generalized eruption. Very rarely lichen papules become vesicular.

The **Etiology** of lichen is not yet definitely established, but many exciting causes of vegetable nature (fungi) have been assumed to exist.

The **Diagnosis** can be made without any difficulty if typical lichen papules are present.

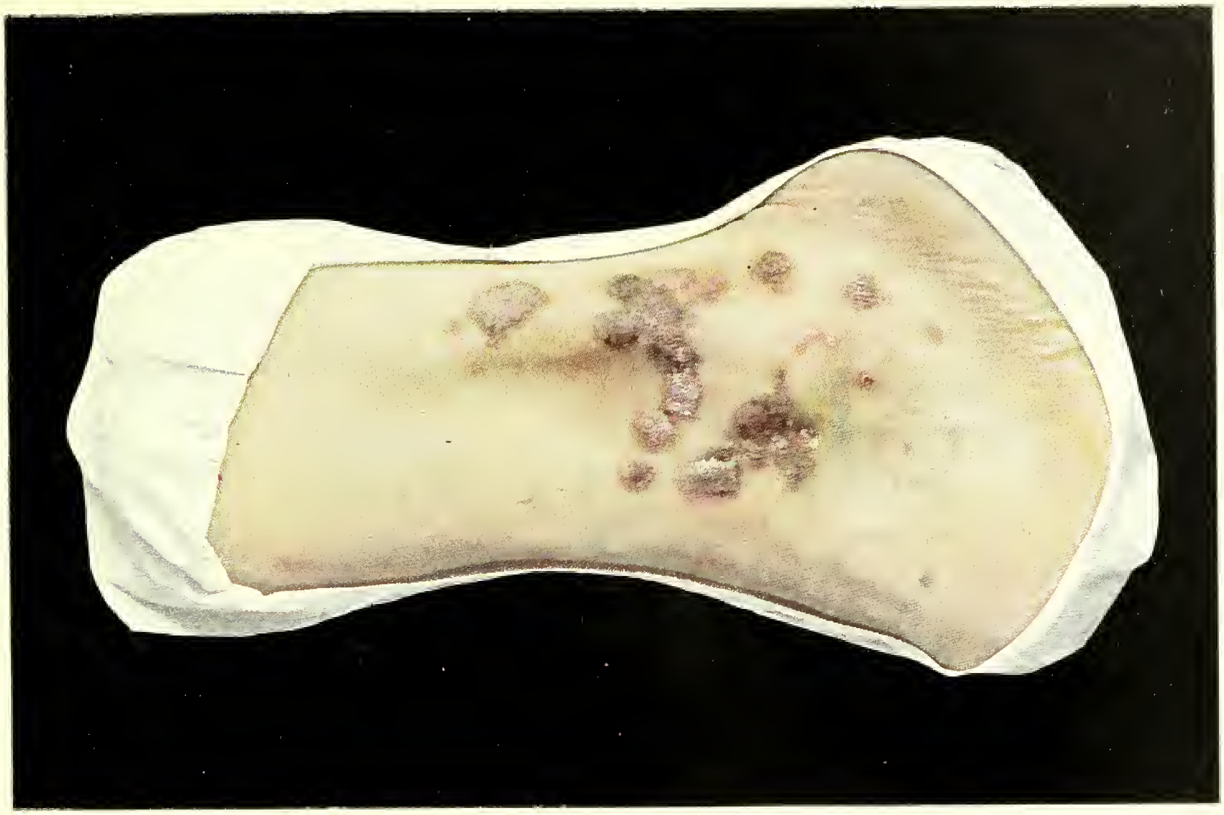
The **Differential Diagnosis** must first be made from the small papular syphilide—sometimes unfortunately called *Lichen syphiliticus*—which may, however, be distinguished by the coppery colour characteristic of syphilitic eruptions, by the absence

of itching, and by the presence of concomitant manifestations of syphilis. When large tracts of skin are involved by lichen, difficulties may arise as to diagnosis from psoriasis ; but in the latter disease there are no typical lichen papules and none of the scratch-mark phenomena described, whereas the typical, large, mother-of-pearl-like lamellar scales are present. The diagnosis may be difficult when the soles and palms are involved, as lichen causes large callosities in these situations. The primary lesions must, therefore, be looked for and the existence of itching considered in establishing a diagnosis between lichen on the one hand and ichthyosis or psoriasis on the other.

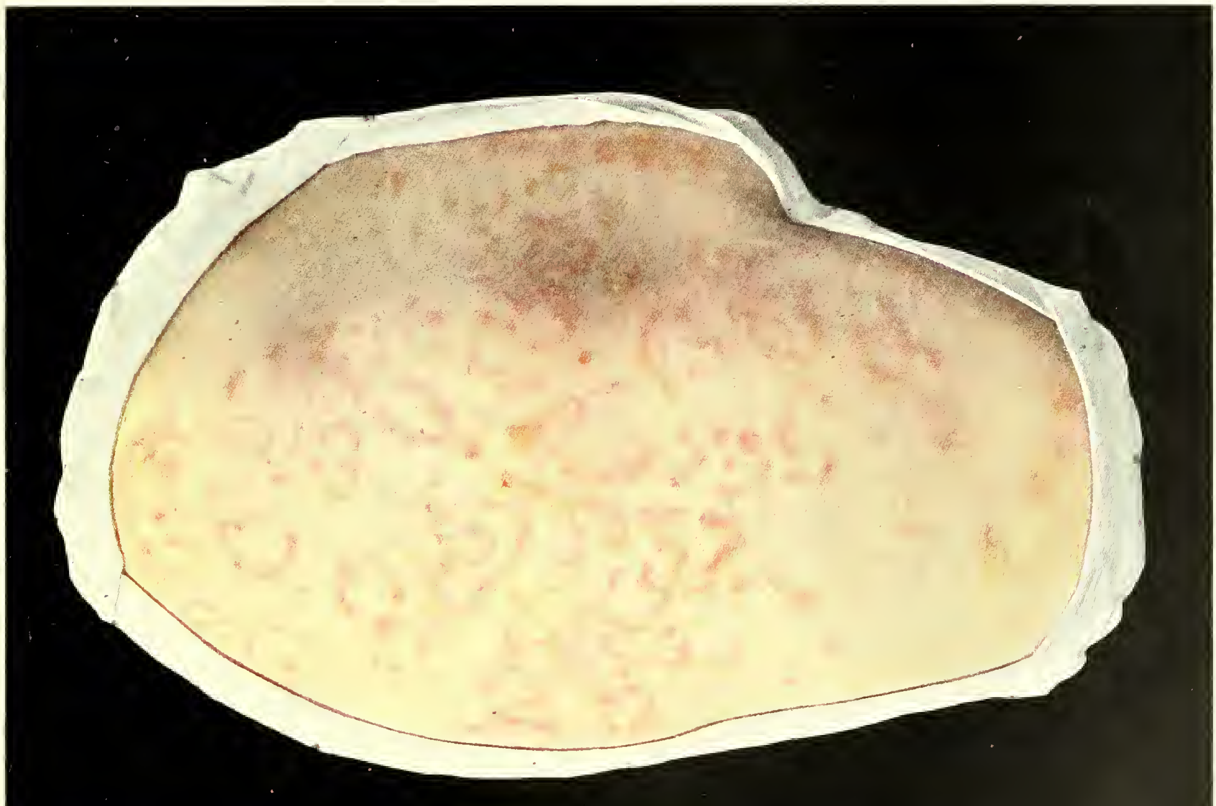
The **Prognosis** is, on the whole, favourable but relapses and recrudescences are not infrequent during treatment. Fatal cases of Lichen acuminatus of Hebra are no longer observed.

Treatment.—Most important is the internal administration of arsenic, either in the form of 'Asiatic pills,' or by subcutaneous or intramuscular injection of the liquor sodii arseniatis ; but recovery only sets in after comparatively large doses have been administered. The first object of external treatment is to allay itching by the use of tarry applications. Chrysarobin, pyrogallol, mercurial plaster, or Unna's sublimate and carbolic acid plaster-mull, act well in combination with warm baths.

Figs. 53, 55. Models in Saint Louis Hospital in Paris (Baretta).
Figs. 54, 56. Models in Neisser's Clinic in Breslau (Kröner).
Fig. 57. Model in Lassar's Clinic in Berlin (Kasten).



56. Lichen planus verrucosus.



55. Lichen planus annularis.

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Leucoplakia.

PLATE XXXI., FIG. 58.

On the tongue, especially at the margins, on the buccal mucous membrane in contact with the teeth, at the angles of the mouth, and on the mucous lining of the lips, roundish, often confluent patches are frequently present, especially in persons who smoke and drink to excess, over which the epithelium is thickened and opaque. They pursue an extremely chronic course, they are slightly, if at all, raised and exhibit little or no inflammation at the edge. In many cases there is a history of antecedent syphilis, but the affection can certainly not be regarded as specific, inasmuch as it also occurs in non-syphilitic subjects, and is absolutely uninfluenced by anti-syphilitic treatment. Epithelioma may develop on leucoplakial patches as the result of long-continued irritation. There is usually very little pain.

The **Diagnosis** is easy in typical cases, as the long duration, the localization and the absence of inflammatory phenomena permit of easy distinction from syphilitic plaques. Lichen planus of the mucous membrane of the mouth is always accompanied by lichen elsewhere. The ' geographical tongue ' is congenital, and soon alters in character.

The **Prognosis** is, on the whole, favourable, except in the rare cases in which carcinoma develops on a leucoplakial basis.

Treatment can only be followed by good results in the early stages. Apart from local treatment by chromic and lactic acids, papayotin or salicylic alcohol, lotions of decoction of bilberry are recommended. Obviously, smoking and indulgence in alcohol must be interdicted.

Fig. 58. Model in Saint Louis Hospital in Paris (Baretta).

58. Leukoplakia linguae.

57. Lichen planus linguae.

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Lichen Simplex Chronicus,

(*Vidal*).

PLATE XXXII., FIG. 59.

The affection termed Lichen simplex chronicus of Vidal (*Neurodermitis* of Brocq, *Dermatitis lichenoides pruriens*) attacks the neck, the inner sides of the upper parts of the thighs, the flexures of the knees and elbows, the peri-anal region, and more rarely, the lateral aspects of the abdomen ; it must be distinguished from true lichen. Violent itching occurs in situations where at first there are few or no demonstrable changes, so that the patients are compelled to scratch and thus produce a diseased condition which, at its maximum of intensity, shows a central, lichenified area of gray or grayish-brown tint, surrounded by a brighter zone, in which more or less numerous, small, slightly scaly and generally scratched, lichenoid papules are present. The disease is extremely chronic and is more frequent in women than in men.

The **Diagnosis** in fully developed cases is easily made from the localization, the chronic course and the absence of marked inflammatory phenomena.

Treatment of the most prominent symptom is best accomplished by the use of tarry or chrysarobin ointments. General treatment with arsenic is almost entirely useless.

Fig. 59. Model in Neisser's Clinic in Breslau (Kröner).

Pityriasis Rubra Pilaris.

PLATE XXXII., FIG. 60.

Pityriasis rubra pilaris is an extremely chronic but benign affection—in contradistinction to Lichen ruber acuminatus with which it is often erroneously identified —in which small, circumscribed, horny papules which are often crateriform and penetrated by hairs, form round the follicles ; they are of white or grayish tint, and occur most abundantly on the backs of the hands, arms and legs, and on the trunk. Often these little nodules coalesce and give to the skin the sensation of a nutmeg-grater. In places the follicular composition of the eruption is irrecognisable, so that a psoriasiform appearance is presented. The soles and palms exhibit thickening of their epidermis and deepening of their natural folds; in very extreme cases the nails are involved. The severity of the inflammation varies within very wide limits.

The **Diagnosis** of this somewhat rare disease may, in typical cases, be made without difficulty from the presence of the white horny masses and their localization.

The **Prognosis** is favourable.

The **Treatment** consists in the employment of baths and tarry, chrysarobin or pyrogallic acid ointments.

Fig. 60. Model by Dr. Bayet of Brussels.

No. 59. Lichen simplex chronicus (Vidal).

No. 60. Pityriasis rubra pilaris.

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Lichen Pilaris.

PLATE XXXIII., FIG. 61.

The disease called Lichen pilaris occurs chiefly on the extensor surfaces of the forearms and legs in children up to the age of puberty; it is often considered to be the mildest form of ichthyosis. Over the regions mentioned the follicular orifices are closed by small horny plugs which, when removed by scratching, disclose a twisted lanugo hair. Sometimes hyperæmia and inflammatory manifestations appear round the follicles, while, after the little scales are shed, tiny scar-like pits may persist.

The **Treatment** of this perfectly harmless affection consists in the use of macerating salves or simple fats, washing with 'marble soap,' or frequent baths. As the result no real cure occurs, but if these remedies are persisted in, the symptoms, which cause annoyance merely from the cosmetic point of view, may be ultimately controlled.

Fig. 61. Model in Neisser's Clinic in Breslau (Kröner).

Ichthyosis.

PLATE XXXIII., FIG. 62.

By the name *Ichthyosis* is understood a hereditary change in the skin, manifesting itself in early childhood, in which the impaired functions of the sebaceous and sweat glands, and the excessive formation of epidermis constitute the characteristic features. In the milder degrees (*Ichthyosis simplex*) the epidermis is somewhat thickened and forms firmly adherent, dry scales, which are detached at the edges, especially marked on the extensor surfaces of the extremities and trunk, less so on the face, and almost never present on the palms, soles and flexures. Higher grades of the affection are represented by *Ichthyosis serpentina*, in which the thick, grayish-green scales assume the look of a serpent's skin ; by *Ichthyosis nitida*, in which the scales are of glistening, mother-of-pearl appearance ; and of *Ichthyosis hystrix*, in which warty growths are scattered either irregularly or symmetrically over extensive areas of the skin. Occasionally different grades of the affection occur simultaneously in the same person (Fig. 62). In true ichthyosis there are no inflammatory phenomena but eczema may occur as a complication. Sometimes regular shedding of the horny masses or 'moulting' may occur. The disease, which is incurable, usually gives rise to no subjective symptoms, but in its most marked forms may be extremely disfiguring.

No. 61. Lichen pilaris.

No. 62. Ichtyosis.

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The skin affection called *Ichthyosis congenita*, which is present at birth, and generally in prematurely born children, is characterized by the existence over the whole body of seborrhœic plates, like a coat of mail; it ought not to be considered a true ichthyosis.

The most important etiological factor is heredity, and it is worthy of remark that frequently individuals of one sex only in the family are affected, while instances of skipping over some generations occur.

Treatment may certainly cause the manifestations of ichthyosis to disappear for a time, but never effect a cure.

The use of baths after preliminary inunction with salicylic ointments or soaps, with sulphur soaps or spiritus saponis alkalinus, generally suffices to remove the superfluous horny masses, while in milder cases the simple anointing of the body may be efficacious.

Fig. 62. Model in Lesser's Clinic in Berlin (Kolbow).

NOTE.—The plate is named Ichtyosis by a printer's error, but this curiously illiterate method of spelling is adopted in many countries.—J. J. P.

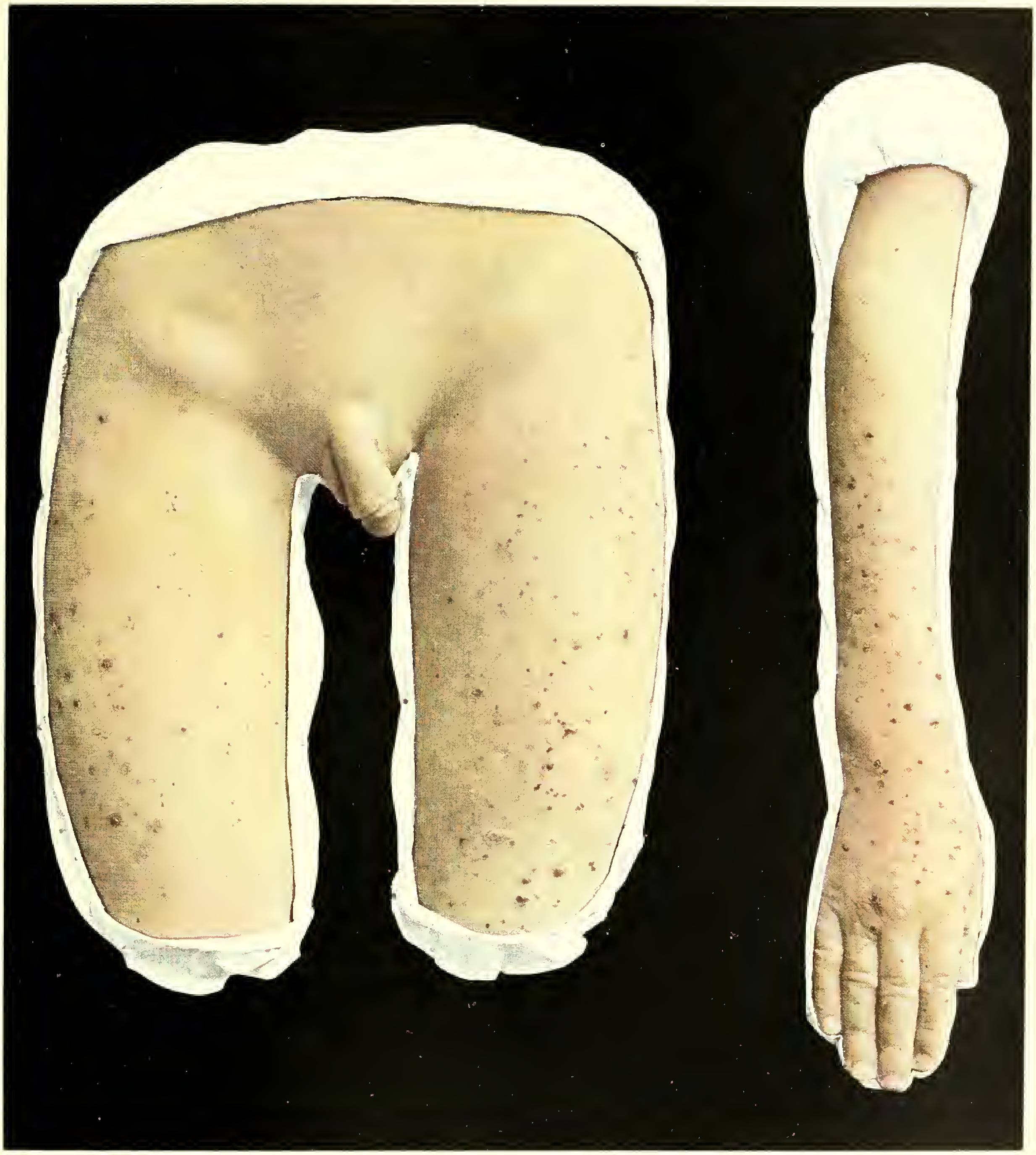
Prurigo.

Plate XXXIV., Figs. 63, 64.

Hebra's Prurigo is a disease which begins in early childhood; its typical, elementary lesions are localized principally on the extensor surfaces of the extremities (Figs. 63, 64), while generally the flexor surfaces are free and, even in severe cases, the flexures of the knee and elbows remain so. The trunk is usually only moderately affected, the face as a rule remaining free. The typical prurigo lesions develop from those of chronic infantile urticaria; they consist of conical papules which itch violently, and are usually at first covered by normal skin, which is scratched soon after their eruption. As a result, the skin becomes densely infiltrated and pigmented, its surface rough and nutmeg-grater-like; its glandular structures and hair atrophy. Firm, indolent swellings of the lymphatic glands in the groins and axillæ also result (*Prurigo buboes*, Fig. 63).

The disease may be ameliorated by suitable treatment but is not really curable; afflicted children generally remain backward in growth and development.

The severest attacks generally occur in autumn and winter, and in patients of the poorer classes, who are the most frequently attacked. Eczemas and deep ulcers may be observed as complications resulting from the frightful pruritus, which occurs in paroxysms.



63. 64. Prurigo.

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The intensity of the malady varies within wide limits (*Prurigo mitis—Prurigo agria seu ferox*).

The **Prognosis** may be considered as favourable in mild cases only ; in severe cases the disease is merely capable of some alleviation.

The **Diagnosis** is based upon the presence of the typical prurigo-papules and their localization on extensor surfaces ; on the dense infiltration of the skin over the seats of predilection ; on the deep pigmentation and glandular swellings ; and, finally, on the development of the disease from chronic infantile urticaria.

The **Differential Diagnosis** need only be made from eczema, which can be easily excluded by the differences in localization, the absence of the typical nodules and by the frequent occurrence of weeping in that disease.

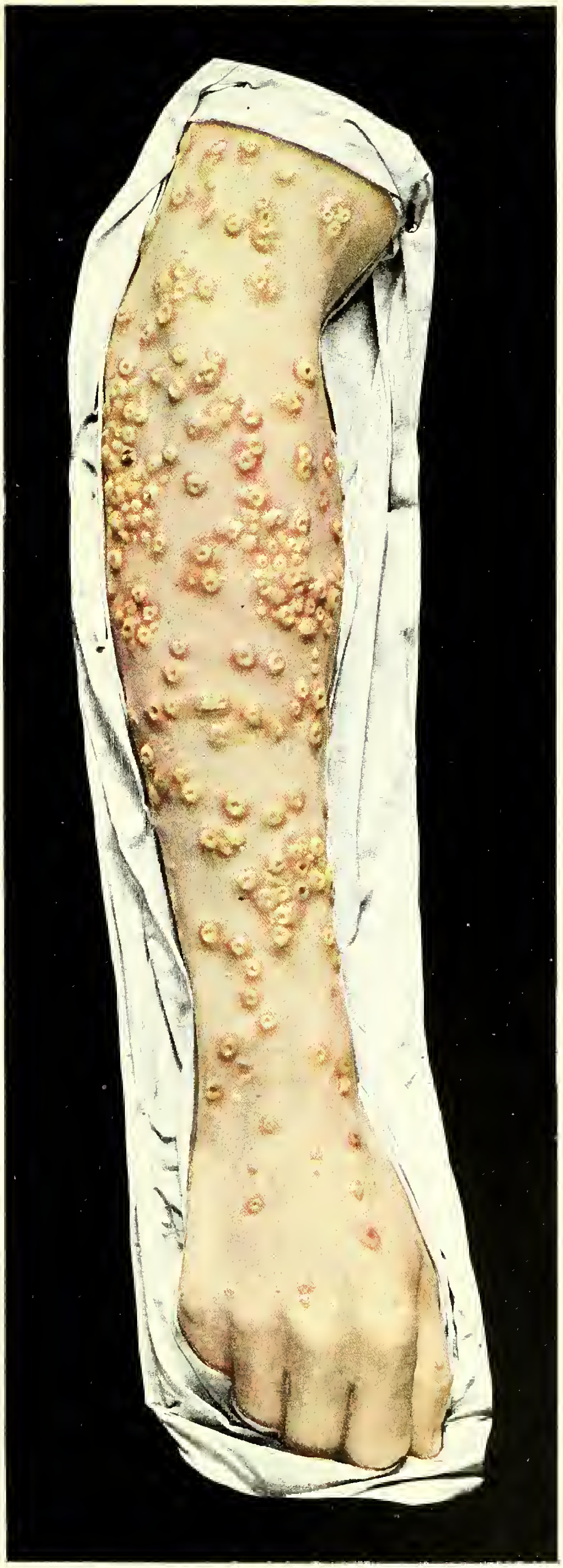
Treatment must be begun as early as possible and must be continued for a very prolonged period. No internal medication is efficacious, but good feeding and the bringing of the patient into healthy surroundings and general conditions assist local treatment. This has for its main objects the relief of itching—as a great part of the skin-changes are referable to scratching—and the restitution of the functions of the cutaneous glands. For these purposes prolonged baths containing tar or sulphur are of service, while ointments with tars, naphthol or epicarin (2-5 per cent.) may be rubbed in with advantage. Finally, Turkish baths or pilocarpine subcutaneously may be employed.

Figs. 63, 64. Models in Neisser's Clinic in Breslau (Kröner).

Variola. Small-pox.

Plate XXXV., Fig. 65.

Small-pox is an extremely infectious disease, the contagium of which is still unknown; it is, however, very resistant and is capable of communicating the malady both directly and indirectly. After a period of incubation ranging from ten days to a fortnight, severe general symptoms manifest themselves, especially high temperature, backache, delirium, vomiting and swelling of the spleen. Then a prodromal eruption appears, which is composed of erythematous or hæmorrhagic spots occurring chiefly on the abdomen and inner sides of the thighs; this diminishes in a few days at the same time as the fever and general symptoms decrease. Now the characteristic eruption appears, first on the scalp and face, then on the trunk, arms and legs in the form of small, red nodules which increase in number and size, and develop into vesicles with clear contents. As the temperature again rises the contents of the vesicles become cloudy, a little depression or umbilication forms in their centre and the pustules, which may either remain discrete or run together, surrounded by a red zone, represent the acme of the eruption's development or 'maturation' (Fig. 65). The rash is specially abundant and confluent on the face and hands, but the mucous membranes—especially the conjunctivæ—may also be involved. At this stage



No. 65. Variola.

No. 66. Varicellae (in adulto).

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serious nervous disorders and internal complications occur, which gravely imperil the patient.

In favourable cases the involution of the eruption begins in from twelve to fourteen days, with some fall in temperature. The pustules dry up and form crusts, which separate in three or four weeks, leaving red scars, when the process may be considered as at an end, although the period of infectivity lasts some time longer. In less favourable cases, the epidermic covering of the vesicles is shed, and extensive pustulating surfaces are exposed, while the general symptoms remain extremely severe. Confluent and hæmorrhagic small-pox must always be regarded as specially virulent forms which generally end fatally. Milder forms with scanty eruption, or abortive cases in which the rash is arrested in the earlier stages of its development, run a shorter course, with less severe general symptoms.

Apart from the above-mentioned nervous disorders and internal complications others may arise, especially secondary infections, and these may cause death by general sepsis, or extensive scarring and the loss of one or both eyes.

The **Diagnosis,** which is often extremely difficult in the earlier stages—or, indeed, scarcely possible—becomes easy when the rash with its typical pustules is fully developed.

The **Differential Diagnosis** must be established from other infectious diseases, more especially from pustular syphilis, but the latter always shows other 'specific' manifestations on close examination. In every case one must ascertain if the patient has been recently vaccinated and if he has been exposed to the danger of contagion. In chicken-pox the general condition is not so grave, the prodromal eruption and

the umbilication of the vesicles are not present; and different stages of development of the eruption are almost always present at the same time.

The **Prognosis** of variola is always dubious, the percentage mortality differing markedly in different epidemics; the severity of infection, as well as the age of the patient, must be taken into account; the danger is greatest in children and old persons.

Prophylaxis against small-pox is of the very highest importance. Vaccination, properly carried out and sufficiently often repeated, is a nearly certain guarantee against contracting the disease and has almost entirely stamped it out in Germany where it was formerly so prevalent.

Suitable **Treatment** consists chiefly of rest in bed with proper dietetic measures and afterwards of baths. In the later stages the maintenance of integrity of the vesicles, the protection from scratching, the provision of free escape for secretion and the avoidance of secondary infections must be considered, and these are best carried out by means of antiseptic lotions (solutions of silicate of aluminium, boric acid, resorcin, ichthyol, etc.). Of late years an old method has been revived and placed on a scientific basis by Finsen, viz., exposure to red light with exclusion of the chemically active rays. It appears that if this method is rigidly carried out, the suppuration of the lesions, and consequently secondary infections and scar-formation, can be avoided with considerable certainty. The attempted removal of resulting scars by 'scaling' processes can only be successful in very exceptional cases.

Fig. 65. Model in Saint Louis Hospital in Paris (Tramond).

Fig. 1.—Discrete Small-pox.

Fig. 2.—Discrete Small-pox.

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Fig. 1.—Confluent Small-pox.

Fig. 2.—Hæmorrhagic Small-pox.

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Variola. Small-pox.

(Addendum.)

Plate XXXV., A and B.

In view of the extreme practical importance of the subject of small-pox the Editor has thought it useful to append four photographs illustrating typical cases of the disease in different phases.

Plate XXXV., A, Fig. 1 shows a characteristic case of discrete small-pox in the beginning of the pustular stage.

Fig. 2 shows a more advanced degree of the same stage on the ninth day of the disease. In both photographs the typical localization of the eruption is represented.

Plate XXXV., B, Fig. 1 illustrates an extremely severe case of confluent small-pox in a man aged 23 on the tenth day of the disease.

Fig. 2 illustrates a case of hæmorrhagic small-pox in a child aged $2\frac{1}{2}$ years, which proved fatal on the fourth day of the disease.

None of the four cases depicted were protected by vaccination.

Variola modified by Vaccination.

Plate XXXV., C.

Although variola may undoubtedly occur occasionally in persons who have been vaccinated with apparent success, the disease is invariably modified and never assumes the severe type illustrated in the preceding photographs.

The eruption usually is abortive or it may cease and retrograde in any of its phases. The rash is always scanty and sparse in distribution ; the papular element is much more prominent than the vesicular, and the lesions soon dry up to form small, brownish scabs which may, however, adhere for a long time deeply embedded in the skin. Such a condition often permits of a retrospective diagnosis being made in well vaccinated persons, supposed to have suffered from influenza or other febrile diseases.

Fig. 1 illustrates a typical case, in which the vaccination had been an accidental one on the chin, the mark of which can be indistinctly perceived in the photograph. The patient was alleged to be unvaccinated (see Dr. Meredith Richards, 'Treatment,' Vol. V., No. 10, p. 723).

Fig. 2 shows typical modified vesico-papules with discoid scabs.

Fig. 1.—Typical Modified Small-pox.

Fig. 2.—Typical Modified Vesico-papules.

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Vaccinia.

PLATE XXXV., D AND E.

Vaccinia is a disease, due to a specific contagium, produced by the inoculation of a human subject with vaccine lymph. In normal vaccination there is usually a period of incubation lasting about three days. On the third or fourth day papules develop over the seat of inoculation which, passing through a vesicular stage, culminate as pustules about the tenth day. A scab then forms which separates between the fourteenth and twentieth day, leaving a scar which is red at first but gradually becomes white and pitted. An areola of greater or less extent usually shows itself about the fifth day, when the vesicles begin to form.

Secondary infections may complicate vaccination wounds like any other sores, and erysipelas, pyæmia, etc., may arise; fortunately such accidents are rare.

Accidental inoculation of vaccine lymph by rubbing or scratching may occur, giving rise to pustules on various parts of the body, more especially on the genitals (Plate E, Figs. 2 and 3) or face. A similar state of affairs may probably be caused by absorption and diffusion of the lymph throughout the system (*generalized vaccinia*). Such accidents are best averted by careful antiseptic precautions applied to the vaccination wounds.

The effects of auto-inoculation on a child suffering

from prurigo are illustrated in Plate XXXV., E, Fig. 1 (*a*), a typical small-pox eruption being shown alongside for comparison (*b*). In the same way eczema may be greatly aggravated by the accidental inoculation of vaccine lymph and the consequences of such contamination are frequently serious (Plate XXXV., D, Figs. 1 and 2). Hence the necessity for the precaution usually exercised of never vaccinating a child suffering from any active skin eruption.

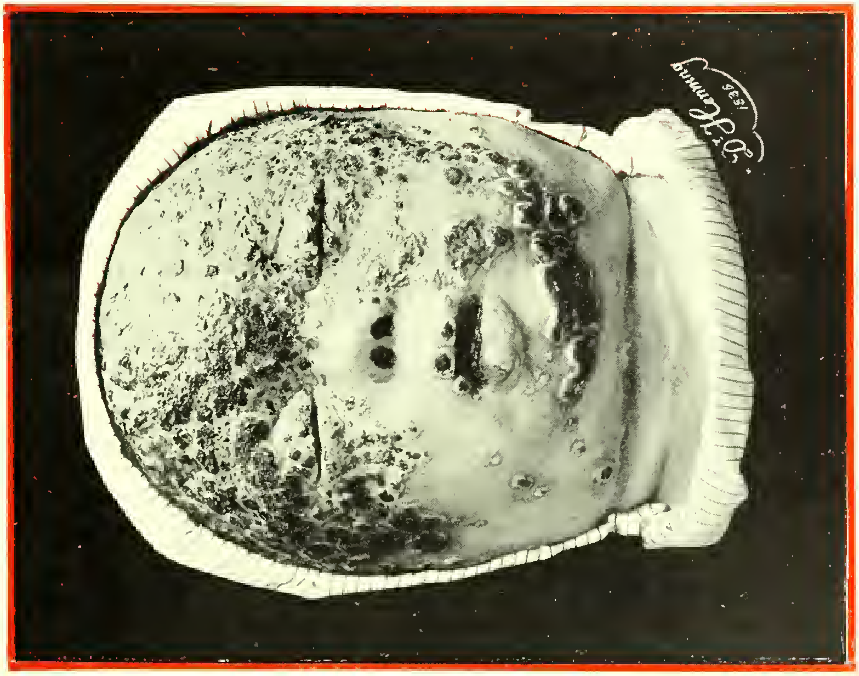

Fig. 1.

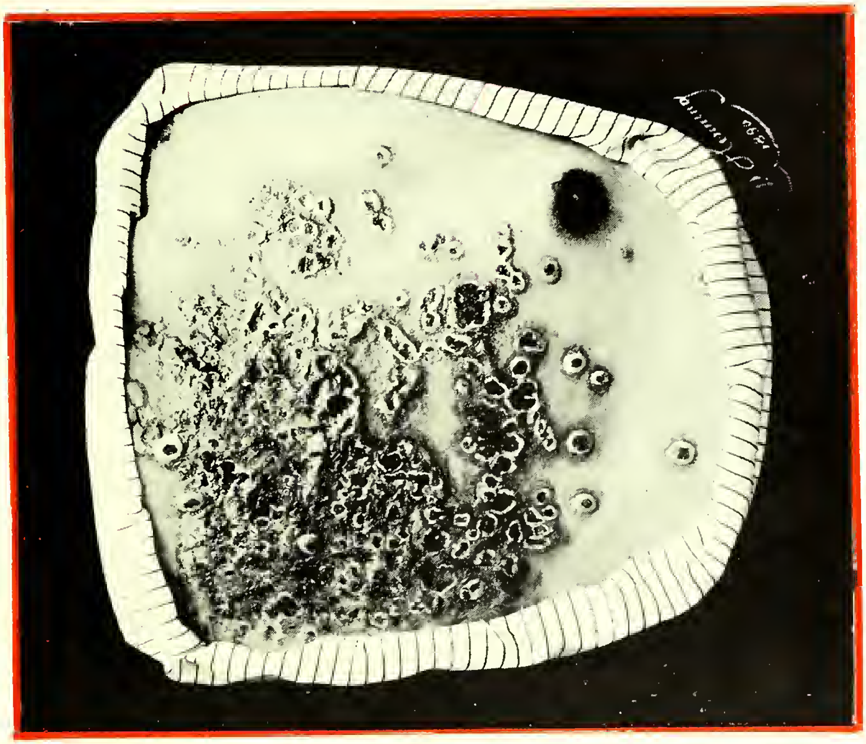

Fig. 2.

Eczema aggravated by Vaccine Lymph.

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(a) (b)

Fig. 1.

Generalized Vaccinia

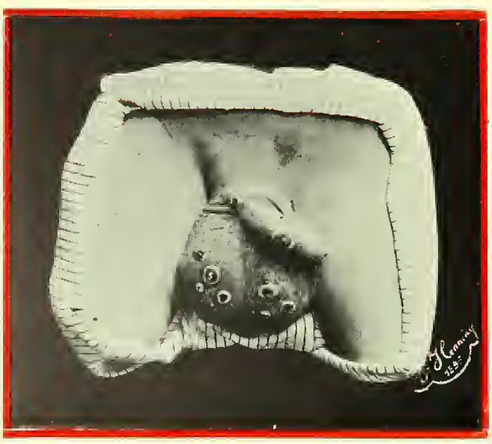

Fig. 2.

Fig. 3.

Generalized Vaccinia.

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No. 67. Varicellae (in infante).

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Morbilli. Measles.

PLATE XXXVII., FIG. 68.

Measles is an infectious disease commonest amongst children, which almost always occurs in epidemics ; its virus is unknown ; it is communicable from person to person directly or indirectly ; and in most instances one attack affords lifelong immunity against another.

After an incubation period of about ten days febrile symptoms manifest themselves, with catarrhal phenomena implicating the mucous membranes—conjunctivitis, violent coryza, noisy cough—and swelling of lymphatic glands. Spotty redness appears on the palate and small white specks on the buccal mucous membrane. In four to six days after the onset of the malady the characteristic eruption appears,—almost always first on the face,—in the form of tiny red, follicular papules, surrounded by a slightly elevated, pale red zone of variable size. When the rash attains its maximum, generally about two days after its appearance, numerous flat, wheal-like lesions are scattered over the whole body, which often coalesce but always leave portions of skin unaffected ; the follicular papules remain, however, recognisable (Fig. 68). The temperature, which usually reaches from 40 to 40·5° Centigrade (104-104·8° Fahrenheit), now falls rapidly, catarrhal symptoms diminish, the skin begins to pale and desquamate with branny scales, and after eight or ten days in a normal case convales-

cence sets in, which is seldom interrupted by fresh recrudescences.

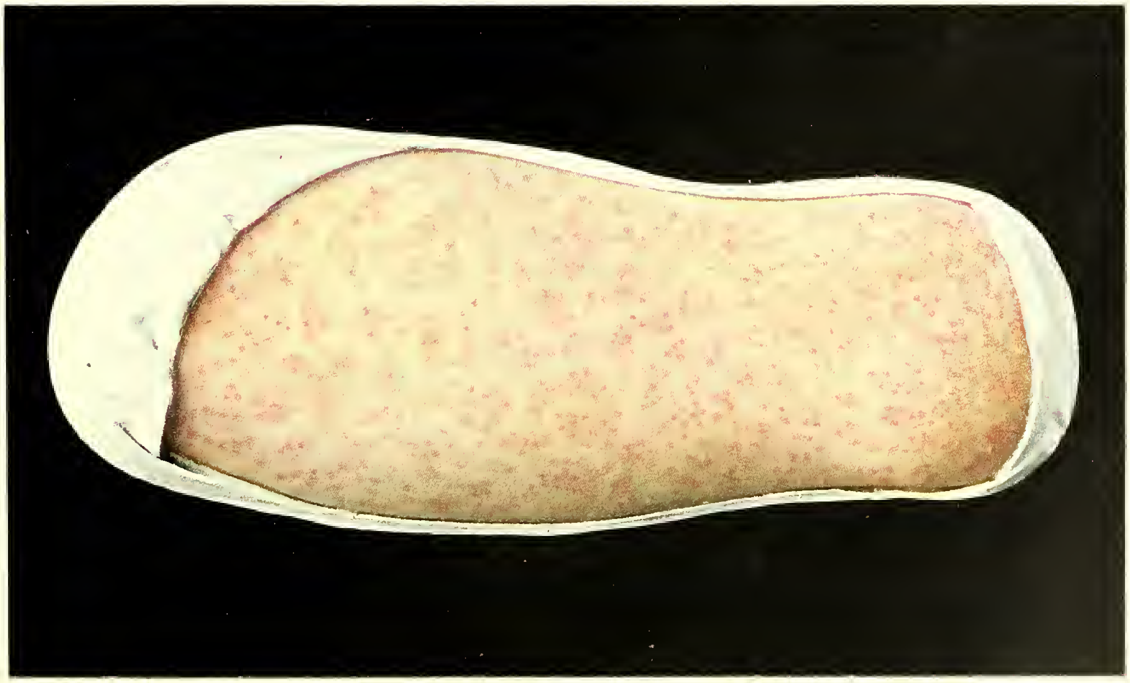
Sometimes the eruption does not attain its full development; or it may occur in the form of vesicles or small papules, and it may ultimately become completely confluent. Hæmorrhagic and gangrenous eruptions sometimes, but very rarely, occur. The ordinary course of measles may be interrupted by complications which are frequent, especially affections of the eyes, ears, throat and lungs. Involvement of the kidneys and the supervention of noma are more exceptional. Whooping-cough and tuberculosis are of comparatively common occurrence as the result of severe, long-continued measles.

The **Diagnosis** of measles is not difficult in presence of an epidemic. As points in differential diagnosis it is to be noted that in scarlatina catarrhal symptoms are absent and the whole body surface is usually involved by the rash. In syphilitic roseola the presence of a primary sore and of indolent glandular swellings clear up the diagnosis.

Treatment consists chiefly in confinement to bed until desquamation ceases, in protecting the skin, in giving the dietary usual in febrile conditions and in guarding the patient from chills. The supervention of complications must be carefully watched for.

Fig. 68. Model in Neisser's Clinic in Breslau (Kröner).

69. Scarlatina.



68. Morbilli.

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Scarlatina. Scarlet Fever.

Plate XXXVII., Fig. 69.

Scarlatina is an excessively contagious disease, the contagium of which (? streptococci) is not yet definitely known; it maintains its virulence for a very long time and the disease is directly and indirectly communicable for an extremely prolonged period. Children from two to ten years of age are most frequently attacked, but adults may also suffer from it. Infection usually enters the organism by the mouth, but may do so by wounds of skin or mucous membrane (*e.g.* in parturient women).

After a period of incubation lasting from two to eight days, the disease usually sets in suddenly with fever, sore-throat and nervous disturbances, soon after which the typical eruption appears. It consists of a countless number of closely aggregated, red points on a deep red, erythematous base (Fig. 69). The process is at its height on the third day after the onset of the disease. The entire surface of the body,—with the exception of the chin and lips,—is covered with a deep red exanthem which looks still redder in the evening; general symptoms are very severe, the temperature being high and the pulse rapid. The tongue is coated from the first, and of a raspberry-red colour; the sore throat may be of great intensity and may ultimately eventuate in parenchymatous or diphtheroid inflammation of the throat, and in more or less deep gangrene. In favourable cases the symptoms diminish after three or four days; the eruption becomes paler, gradual

reduction of the temperature takes place, the discomforts produced by the sore throat subside, and convalescence sets in seven to nine days after the onset of the malady, with characteristic lamellar desquamation. Recovery is often, however, interrupted and retarded by scarlatinal nephritis.

Not infrequently the eruption shows variations from the type just sketched; thus, vesicles may form, or papular eruptions; more rarely measley, roseolous or hæmorrhagic rashes may appear. In very exceptional cases the eruption may be very scanty or entirely absent, while extremely severe general symptoms may be present, leading rapidly to a fatal termination.

Scarlatinal nephritis is the complication most frequently to be feared and generally shows itself in the course of the second week, often accompanied by fever, vomiting and œdema. It either soon passes off or causes death by uræmia, endocarditis, heart-failure, etc. The throat trouble may also prove fatal by producing extensive suppuration, necrosis and general sepsis. Other complications of frequent occurrence and gravity are affections of the ears and joints, and various paralyses.

The **Diagnosis** of scarlatina is easily made from the typical rash, the sore throat, the desquamation in large sheets and the subsequent nephritis. Similar eruptions which develop in some subjects after the administration of certain drugs (belladonna, quinine, copaiba) never present the *ensemble* of symptoms of scarlatina.

Prognosis must always be very guarded in view of the frequent occurrence of complications.

Treatment in cases which run a normal course consists chiefly of rest in bed and careful hygiene of

the skin by frequent cleansings and subsequent inunctions, and of feeding as for other fevers. Of particular importance is the use of mouth washes and gargles of chloride of potassium, acetate of aluminium, ichthyol or peroxide of hydrogen, which may also be used as nasal douches. In diphtheroid sore throat submucous carbolic injections may be tried. Aural complications must always be watched for and the urine must be regularly examined ; nephritis must be treated by dieting, or by baths, sudorifics, etc. Specific treatment by the injection of serums has hitherto yielded no definite results.

The possible communication of the disease to others must be obviated by the strictest and longest possible period of isolation of the patient and his attendants, and by the most strenuous disinfection.

Fig. 69. Model in Neisser's Clinic in Breslau (Kröner).

Anthrax.

Pustula Maligna.

Plate XXXVIII., Fig. 70.

In anthrax the penetration of specific bacilli into a minute epithelial lesion causes fever and the development of a greatly infiltrated, red nodule on the summit of which a hæmorrhagic bleb forms. While the surrounding infiltration diminishes the nodule becomes converted into a necrotic core or carbuncle. In rarer cases numerous smaller nodules form instead of a single nodule, and they may be arranged along scratch marks or any other epidermic lesion (Fig. 70). Simultaneously, or even independently of pustules, a peculiar, blueish or yellowish doughy œdema of the skin may show itself. The corresponding lymphatic glands become painful and swollen. The disease may cease by discharge of the core, or it may end fatally as the result of general infection of the intestine, lungs, etc.

The **Prognosis** is dubious in all cases; in visceral anthrax it is bad.

The **Diagnosis** is founded upon the peculiar hæmorrhagic nature of the 'carbuncles'; on the history of contact with affected animals or their hides; finally, on the demonstration of the bacilli, their

71. Actinomycosis.

70. Anthrax (Pustula maligna).

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cultures, and the results of their inoculation in guinea-pigs and mice.

The **Differential Diagnosis** can thus be established from common carbuncles.

Treatment has for its objects the closing of all points of entry for the specific micro-organisms and the limitation of the area of infection. Locally, destruction with Paquelin's thermo-cautery may be carried out, or injections of carbolic acid made into the affected tissues ; very hot poultices and alcohol dressings may also be recommended.

Fig. 70. Model in Neisser's Clinic in Breslau (Kröner). The patient was a shepherd, whose case was published in full by Dr. Herrmann in the *Archiv f. Dermatologie*, vol. lxii., Nos. 2, 3. Eight days before the eruption appeared he had scratched his skin on a piece of bone while cutting up a dead cow. Most of the pustules corresponded to the scratch-mark. There was extreme swelling of the axillary glands. He died in three days.

Actinomycosis Cutis.

Plate XXXVIII., Fig. 71.

Primary actinomycosis of the integument, due to its direct invasion by the 'ray-fungus,' is extremely rare; as a rule, the disease is secondary to disease of the jaw. Numerous abscesses and fistulæ develop in blueish-red, densely infiltrated skin, most commonly of the lower jaw, in the pus from which the characteristic, yellow granules can be readily recognised microscopically. The disease occurs most frequently in millers, bakers, grooms, and in persons who are in the habit of chewing straw or grain.

The **Diagnosis** can only be definitely established by microscopical demonstration of the fungus, which also settles the differential diagnosis.

The **Prognosis** is favourable in localized cases only; in extensive cases it is dubious.

Treatment was formerly entirely surgical; it consisted of freely opening and scraping out abscesses and fistulæ. Lately, the internal administration of iodine preparations has yielded excellent results.

Fig. 71. Model in Neisser's Clinic in Breslau (Kröner).

Herpes Simplex.

Plate XXXIX., Figs. 72, 73.

Herpes simplex is the commonest of the herpetic group of skin diseases, *i.e.* of benign affections which begin acutely and are characterized by the appearance of grouped vesicles on normal or slightly inflamed skin, and which exhibit no further developments but only undergo regressive changes. They are most frequently localized on the genitals (Fig. 72) or face (Fig. 73). Sometimes with sharp febrile symptoms and sometimes without them, one or several groups of small vesicles—with watery contents—appear upon the lips or their mucous surface, on the immediately surrounding skin or about the nose. These, after a short existence, dry up and heal without leaving scars. The eruption may also appear on the genitals, in men on the prepuce or glans, in women on the vulva and clitoris. Secondary infection or mechanical irritation may result in deeper lesions, so that some delay may occur in the healing process. It is specially to be noted that relapses are extremely common and that the seats of previously existent hard chancres show a marked predilection for herpetic outbreaks, both on the genitals and elsewhere. In some instances direct communication from person to person appears to be not improbable. As a rule there are no subjective symptoms except a little burning.

The **Diagnosis** can always be easily made on the face. On the genitals the differentiation of a herpes which has been badly treated, or become the seat of pus infection, from a soft chancre or primary syphilitic sore, may be difficult at first, but the course of the disease soon settles the point.

The first point in **Treatment** is to ward off secondary infection and to bring about the earliest possible, undisturbed desiccation of the vesicles; this can be done by means of powders, ointments or pastes but the best application is 90-95 per cent. alcohol with the addition of some carbolic acid, resorcin, thymol or salicylic acid.

Figs. 72, 73. Models in Neisser's Clinic in Breslau (Kröner).

73. Herpes labialis.

72. Herpes progenitalis.

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Herpes Zoster. Shingles.

PLATES XL., XLI., FIGS. 74, 75.

Herpes zoster (*Shingles, Zona, Ignis sacer*) occurs as an acute infective disease, the cause of which is unknown; it is characterized by an outbreak of vesicles arranged in groups on an inflamed base and following the distribution of nerves or nerve plexuses (Fig. 74). The disease is almost always unilateral and the eruption is generally accompanied by neuralgic phenomena and swelling of the corresponding lymphatic glands. The vesicles of any one group are always in the same phase of development, but separate groups may appear either simultaneously or consecutively. The number of groups, as well as the number and size of the elementary vesicles, vary within very wide limits. Sometimes only a few papular groups are present or there may be blebs as big as cherries. Subsequently the blebs dry up leaving no scar. But in a certain number of cases the base of the vesicles is hæmorrhagic or gangrenous (Fig. 75), and in them very characteristic, grouped scars are left, sometimes with pigmented margins.

Zoster occurs most frequently in spring and autumn like other infective diseases, and as in them one attack, as a rule, confers immunity against others throughout life. The seat of disease may be in the distribution of the trigeminal nerve, or of various spinal nerves or plexuses. In cases where death has taken place owing to intercurrent disease, lesions of the corresponding

spinal ganglia have generally been demonstrated; but zoster of toxic origin also occurs *e.g.* after poisoning by arsenic or carbonic oxide, and it may result from disease of the nerve trunks.

Central disease of the brain and spinal cord may also cause zoster. The primary lesion is, therefore, always to be sought for in the nervous system. Transgression of the middle line (which sometimes occurs) and extension to the distribution of neighbouring nerves are easily explained by the existence of nerve-anastomoses.

The **Diagnosis** of zoster is easily established from its unilaterality, its typical vesicles and the concomitant neuralgia.

The **Prognosis** is generally favourable but must be guarded with reference to the accompanying neuralgia.

The **Treatment,** in view of the infective nature of the disease, must first consist of the administration of salicylic preparations. The pain may be combated by quinine, phenacetin, antipyrin and similar remedies. The best form of local treatment consists in alcohol compresses, under which healing most rapidly occurs. If there is extensive gangrene, hot compresses of a solution of silicate of aluminium or weak nitrate of silver may be used.

Fig. 74. Model in Neisser's Clinic in Breslau (Kröner).
Fig. 75. Model in Lesser's Clinic in Berlin (Kolbow).

74. Herpes zoster.

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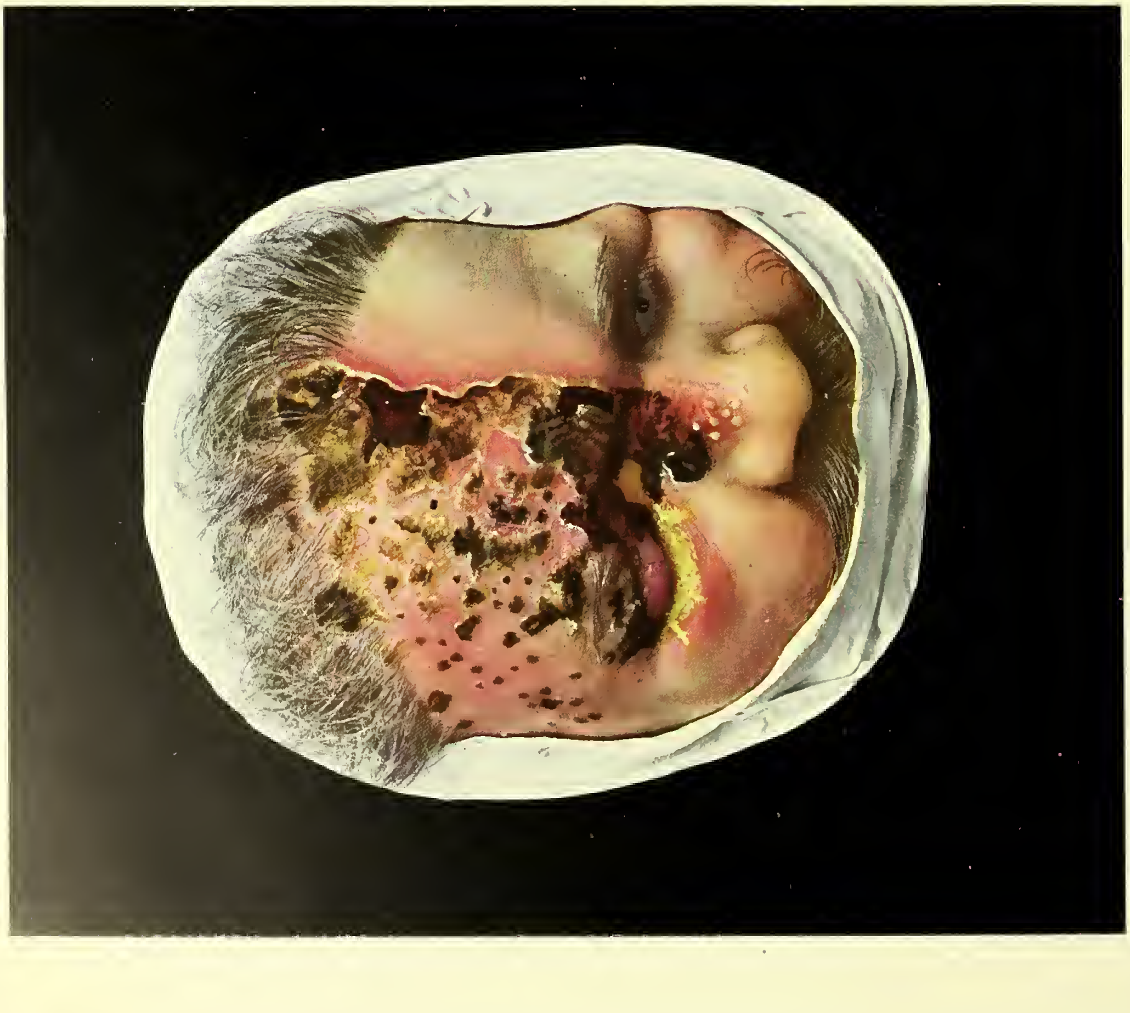
No. 76. Dysidrosis.



No. 75. Herpes zoster gangraenosus.

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Dysidrosis.

Cheiropompholyx.

PLATE XLI., FIG. 76.

In persons who sweat freely there often occur in summer small, clear vesicles which lie deep in the epidermis, especially on the sides of the fingers and toes, on the palms and soles, more rarely on the backs of the hands and feet. They are mostly localized round the excretory sweat-ducts and are accompanied by few or no inflammatory phenomena (Fig. 76). Larger blebs sometimes, but seldom form, the contents of which become cloudy. The vesicles gradually dry up and recovery ensues, accompanied by marked scaling. The disease gives rise to considerable itching. A transition to the establishment of eczema is sometimes observed.

The **Diagnosis** is at first easily made on the grounds of localization of dysidrosis and the absence of inflammatory symptoms.

Treatment attains only moderately favourable results. The hyperidrosis and itching must be chiefly combated; for these purposes painting with alcoholic solutions of tar, resorcin or liquor carbonis detergens is useful, but relapses occur with great regularity.

Fig. 76. Model in Neisser's Clinic in Breslau (Kröner).

Pemphigus.

Plate XLII., Figs. 77, 78.

The name Pemphigus connotes a severe skin-affection of unknown cause, in which a bullous eruption of very chronic nature appears, accompanied usually by febrile phenomena. We do not consider infantile pemphigus (*Pemphigus neonatorum*) or Duhring's disease (*Dermatitis herpetiformis*) as being real forms of pemphigus. Usually two forms of chronic pemphigus vulgaris are recognised,—the one benign, the other malignant—but they cannot be definitely differentiated from one another, inasmuch as the latter may develop from the former. In both forms blebs of various size and indiscriminate distribution and which are filled with clear fluid, occur in crops, arising chiefly from healthy skin, either with or without rise of temperature; sometimes an erythema precedes the eruption. More rarely the contents of the blebs are hæmorrhagic.

The course of pemphigus is usually extremely chronic and after the disappearance of one eruption intervals of months or years may occur before another attack ensues. The mucous membranes may also be attacked apart from the skin, in which case the bullæ do not attain their full development but the raised epidermis adheres in the form of a whitish, circumscribed membrane; however, the mucous membrane is usually involved only in severe or fatal cases in which the skin is also implicated.

77. Pemphigus vegetans.

78. Pemphigus vulgaris.

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In the group of pemphigus diseases *Pemphigus foliaceus* and *Pemphigus vegetans* occupy a special place. Other forms such as *P. circinatus*, with ringed grouping of the vesicles, *P. gyratus*, and *P. pruriginosus* with severe itching must also be classified with Pemphigus vulgaris.

P. foliaceus and P. vegetans almost always end fatally; in the former the blebs are extremely flabby and flat, their contents being cloudy. Often the process does not go so far as bleb formation but the epidermis peels off in thin lamellæ over extensive areas. No normal reproduction of the epidermis takes place, so that after removal of the scales a weeping rete Malpighii is exposed or, if some apparent skinning over take place, the slightest mechanical injury suffices to expose the deep layers of the skin. The disease is accompanied by violent itching and profound interference with general nutrition and, after a prolonged period, death ensues.

Pemphigus vegetans as a rule first manifests itself by blebs, on the seat of which condylomatous outgrowths form, especially on surfaces of skin in apposition, on the genitals and surrounding parts (Fig. 77), in the axillæ and below the mammæ; in these places no normal keratinisation occurs but a dirty, horribly fœtid discharge accumulates. The disease always terminates fatally, its course being usually interrupted by many protracted intervals of passivity.

The **Diagnosis** of P. vulgaris is easy in typical cases if bullous eruptions only appear. If erythematous prodromal rashes occur, it must be diagnosed from erythema multiforme by the differences in localization and course. In its early stages P. vegetans may easily be mistaken for syphilis, but the absence of other signs of syphilis, the course of the disease and

the utter inefficacy of antisyphilitic treatment will decide the matter. The diagnosis of P. foliaceus causes difficulty in many cases, especially as regards pityriasis rubra; the weeping, moist base of the lesions and the occurrence of flabby blebs will, however, decide the diagnosis, as they do not occur in pityriasis rubra.

The **Prognosis** in pemphigus must be very guarded, as the differentiation between the mild and severe forms is at first extremely difficult to establish. In every case of definite pemphigus it must be considered dubious.

No efficient **Treatment** of pemphigus yet exists. We can only diminish the often terrible sufferings, the itching, and the frightful pain which results from the separation of the adherent clothes or bandages from the ulcerated skin by ointments, powders or baths; in extensive cases permanent baths are the best. Internally arsenic, strychnine and antipyrin are recommended, but their value is more than dubious.

Fig. 77. Model in Lassar's Clinic in Berlin (Kasten).
Fig. 78. Model in Neisser's Clinic in Breslau (Kröner).